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INDIANA WATERSHED SUMMARY

SEPTEMBER 30, 1976

CLETUS J. GILLMAN
STATE CONSERVATIONIST

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Indianapolis, Indiana



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LIBRARY

Potential	205
Applications Received	118
Work Plans in Process of Development	5
Work Plans Awaiting Authorization	1
Work Plans Authorized for Construction	25
Construction Underway	(10)
Preconstruction [Design, Land Easements and Rights-of-Way]	(8)
Temporarily Halted	(7)
Applications to be Serviced	6
Inactive	74
PL-566 Projects Completed	7
Pilot Program - Completed	(1)

FOREWORD

This summary has been prepared to reflect the current status of Indiana small watershed projects and applications under Public Law 83-566. It gives brief facts on a statewide basis and specific details about each watershed for which an application has been received. Projections for Fiscal Year 1977 (October 1, 1976-September 30, 1977) are also shown.

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RIVER BASIN AND WATERSHED PROGRESS MAP

INDIANA

PROJECTS**CONSTRUCTION COMPLETED**

- [2] Elk Creek 10-N
- [3] Prairie Creek 6-N
- [6] Boggs Creek 7-M
- [8] French Lick Creek 8-O
- [20] Lollas Creek 6-L
- [23] Little Wea Creek 7-H
- [25] Kickapoo Creek 6-G
- [P10] Flat Creek 6-O

AUTHORIZED FOR CONSTRUCTION

- [1] Busseron Creek 6-L
- [15] Middle Fork of Anderson River 8-P
- [18] Stuckey Fork 11-N
- [26] Jordan Creek 5-G
- [31] Lost River 8-N
- [35] Prairie Creek-Vigo 5-L
- [36] Bachelor Run 8-F
- [39] Muddy Fork of Silver Creek 10-D
- [42] Little Raccoon Creek 6-I
- [45] East Fork Whiteinter 13-I
- [47] Delaney Creek 9-N
- [48] Twin-Rush Creek 9-N
- [50] Mill Creek-Fulton Co. 8-E
- [55] Rock Creek-Wells Co. 12-F
- [58] Upper Big Blue River 11-I
- [59] Big Raccoon 7-I
- [60] Little Walnut Creek 7-J
- [61] West Boggs Creek 7-N
- [66] Rock Creek-Cross Co. 9-F
- [67] Indian Creek 9-K
- [73] Prides Creek 6-O
- [82] Lye Creek Drain 7-H
- [86] Hall-Fini Creek 7-O
- [90] Bailey-Co.-Newson 8-C
- [92] Fall Creek 6-H

AUTHORIZED FOR CONSTRUCTION (CLOSED OUT)

- [7] West Creek 5-C
- [30] Dowell Creek 8-M
- [32] Mill Creek 8-J

PLANNING COMPLETED

- [38] Anderson River 7-P

AUTHORIZED FOR PLANNING

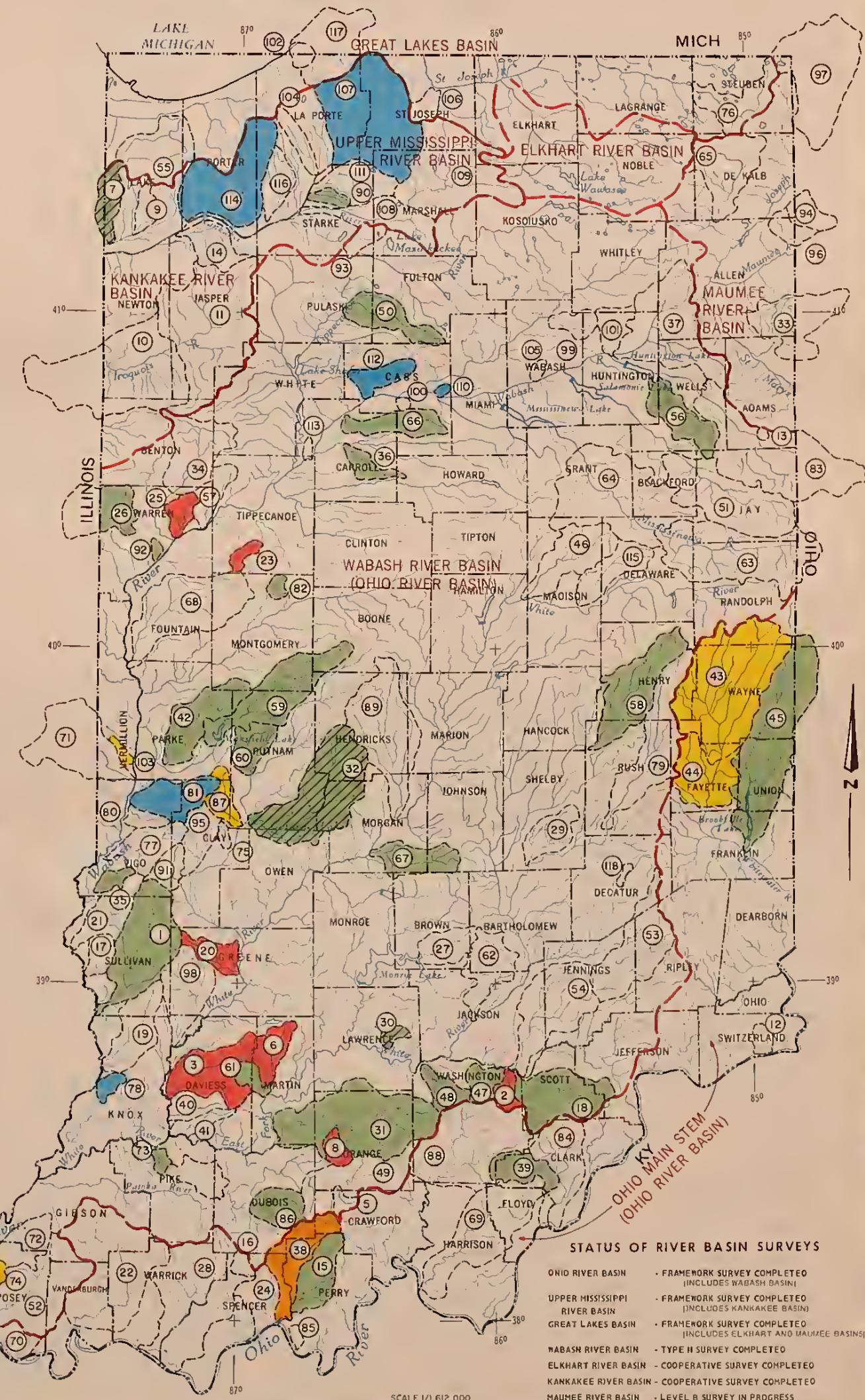
- [43] Upper West Fork Whiteinter 12-I
- [44] Whitewater River-Fayette 12-J
- [74] Gresham Creek 4-P
- [87] Croys Creek 6-J
- [103] Fenster Creek 5-J

APPLICATION ACTIVE

- [78] Snapp-Kolso Creek 5-N
- [81] Otter Creek 6-J
- [107] Upper Kankakee River 8-B
- [110] New Waverly-Williams Creek 9-F
- [122] Crooked Creek 8-E
- [144] Parke Co.-Kankakee River 6-C

APPLICATION INACTIVE, TERMINATED, UNFEASIBLE OR SUSPENDED

- [8] Little Piney Creek 6-O
- [9] Spring Run-Gilesel 6-D
- [10] Lower Iroquois River 5-E
- [11] Upper Iroquois River 6-E
- [12] Log Lick Creek 13-M
- [13] Long-Amstutz Ditch 13-F
- [14] Barnard Ditch 6-D
- [15] North Fork of Little Pigeon Creek 7-P
- [17] Turtle Creek 5-L
- [19] Marlin Creek 6-M
- [21] Turman Creek 5-L
- [22] Pigeon Creek 5-P
- [24] Crooked Creek 7-P
- [27] Middle Fork of Salt Creek 9-L
- [28] Little Pigeon Creek 6-P
- [29] Lewis Creek 10-K
- [33] Flint Rock Creek 13-E
- [34] Big Pine Creek 6-G
- [37] Little River 12-E
- [40] Veale Creek 6-N
- [41] Aikman Creek 6-N
- [40] Pipe Creek 11-G
- [49] Upper Piney River 8-O
- [51] Salamonie River 12-G
- [52] Big Creek 4-P
- [53] Upper Vernon Fork 11-L
- [54] Lower Vernon Fork 11-M
- [55] Deep River 6-C
- [57] Little Pine Creek 6-G
- [62] White Creek 10-L
- [63] Upper Mississippi River 12-H
- [64] Lower Mississippi River 11-G
- [65] Cedar Creek 12-C
- [68] Con Creek 6-H
- [69] Indian Creek 9-O [4] Little Indian Creek
- [70] Casselberry Creek 4-Q
- [71] Brulette Creek 5-N
- [72] Black River 4-P
- [75] McFly Creek 7-K
- [76] Pigeon River 12-B
- [77] Honey Creek 6-K
- [79] Upper Big Flanck 11-J
- [80] Lost Creek 6-K
- [83] Buckeye-Hoosier-Wabash River 13-G
- [84] Silver Creek 10-N
- [85] Windy Creek 7-O
- [88] Blue River 9-O
- [89] White Lick Creek 8-H
- [91] Slumpo Creek 6-K
- [93] House-Barlow Ditch 6-D
- [94] Gordon Creek 13-D
- [95] Birch Creek 6-K
- [96] Mario Delarme 13-D
- [97] St. Joseph of the Maumee 13-B
- [98] Olack Creek 6-L
- [99] Pony Creek 10-E
- [100] Goose Creek 9-F
- [101] Clean Creek 11-C
- [102] Blood Run 7-B
- [104] Mill Creek-LaPorte 7-B
- [105] Charley Creek 10-E
- [106] Bowman Creek 9-B
- [109] Lower Yellow River 8-D
- [109] Upper Yellow River 9-C
- [111] Robbins 6-C
- [112] Maiwell Drain 7-F
- [115] Killbuck Creek 11-H
- [116] Machle Ditch 1-C
- [117] Galien River 8-B
- [118] Gas Creek 11-K

RIVER BASIN BOUNDARY

STATUS OF WATERSHED (PL-566) STRUCTURAL MEASURES

INDIANA

SEPTEMBER 30, 1976

CONSTRUCTION COMPLETED

- (2) Elk Creek 10-N
- (3) Prairie Creek 6-N
- (6) Boggs Creek 7-N
- (8) French Lick Creek 8-O
- (20) Lalins Creek 8-L
- (23) Little Wea Creek 7-H
- (25) Kickapoo Creek 6-G
- (P) Flat Creek 6-O

AUTHORIZED FOR CONSTRUCTION

- (1) Busseron Creek 6-L
- (15) Middle Fork of Anderson River 8-P
- (18) Slidell Fork 11-N
- (26) Jordan Creek 5-G
- (31) Losi River 8-N
- (35) Prairie Creek-Vigo 5-L
- (36) Bachelor Run 8-F
- (39) Muddy Fork of Silver Creek 10-O
- (42) Little Raccoon Creek 6-I
- (45) East Fork Whitewater 13-I
- (47) Delaney Creek 9-N
- (48) Twin-Rush Creek 9-N
- (50) Mill Creek-Fulton Co. 8-E
- (56) Rock Creek-Wells Co. 12-F
- (58) Upper Big Blue River 11-I
- (59) Big Raccoon 7-I
- (60) Little Walnut Creek 7-J
- (61) West Boggs Creek 7-N
- (66) Rock Creek-Cass Co. 9-F
- (67) Indian Creek 9-K
- (73) Prides Creek 6-D
- (82) Lye Creek Drain 7-H
- (86) Hall-Fish Creek 7-O
- (90) Bailey-Cox-Newman 8-C
- (92) Fall Creek 6-H

AUTHORIZED FOR CONSTRUCTION (CLOSED OUT)

- (7) West Creek 5-C
- (30) Dowell Creek 8-M
- (32) Mill Creek 8-J

PLANNING COMPLETED

- (38) Anderson River 7-P

AUTHORIZED FOR PLANNING

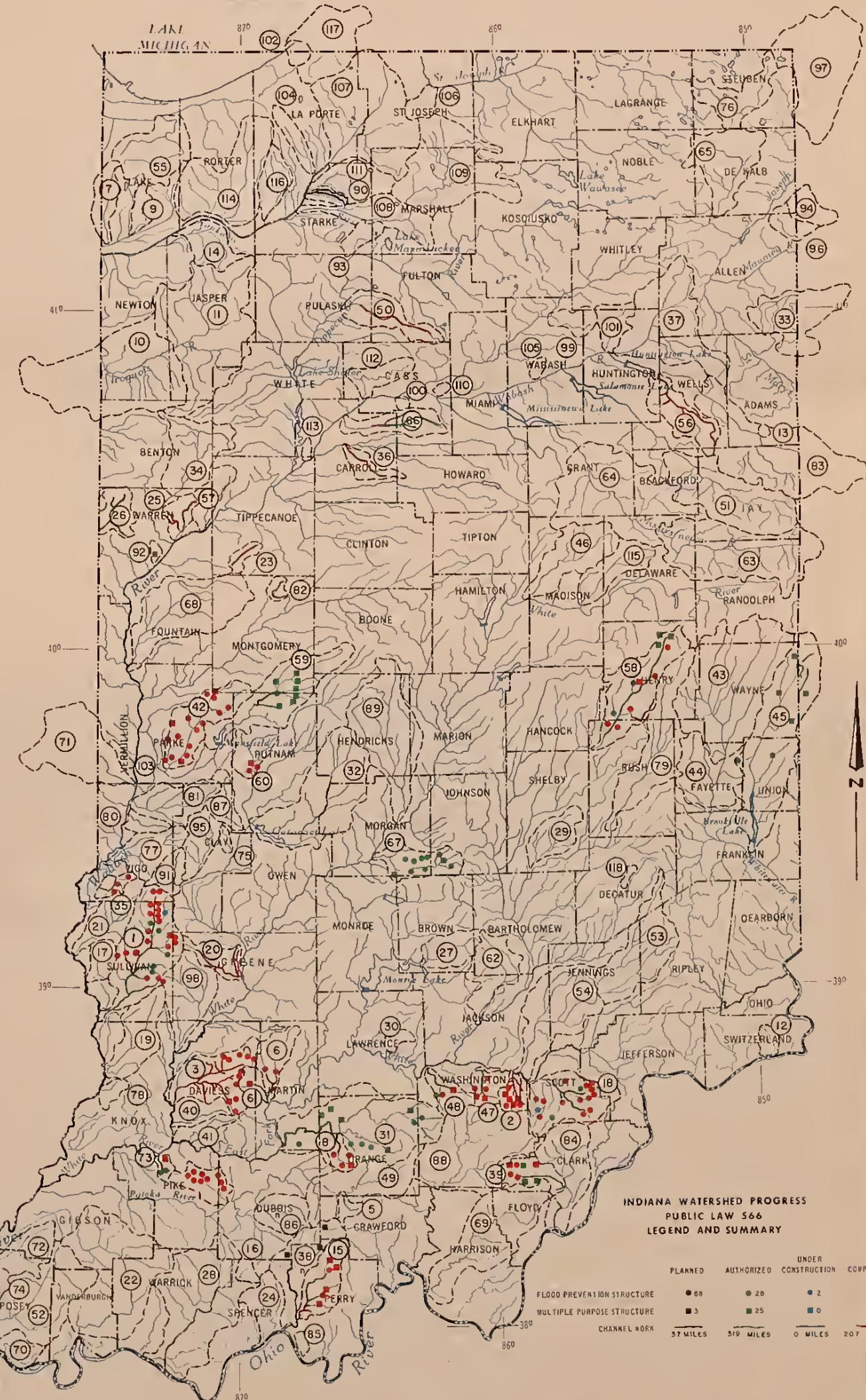
- (43) Upper West Fork Whitewater 12-I
- (44) Whitewater River-Fayette 12-J
- (74) Gresham Creek 4-P
- (87) Croys Creek 6-J
- (109) Feather Creek 5-J

APPLICATION ACTIVE

- (78) Snapp-Kolso Creek 5-N
- (81) Otter Creek 6-J
- (107) Upper Kankakee River 8-B
- (110) New Waverly-Williams Creek 9-F
- (112) Crooked Creek 8-E
- (114) Porter Co., Kankakee River 6-C

APPLICATION INACTIVE, TERMINATED, UNFEASIBLE, OR SUSPENDED

- (5) Little Patoka Creek 8-O
- (9) Spring Run-Grisel 6-D
- (10) Lower Iroquois River 5-E
- (11) Upper Iroquois River 6-E
- (12) Log Lick Creek 13-M
- (13) Long-Anstutz Ditch 13-F
- (14) Barnard Ditch 6-D
- (16) North Fork of Little Pigeon Creek 7-P
- (17) Turtle Creek 5-L
- (19) Mariah Creek 6-M
- (21) Turman Creek 5-L
- (22) Pigeon Creek 5-P
- (24) Crooked Creek 7-P
- (27) Middle Fork of Salt Creek 8-L
- (28) Little Pigeon Creek 6-P
- (29) Lewis Creek 10-K
- (31) Flat Rock Creek 13-E
- (34) Big Pine Creek 6-G
- (37) Little River 12-E
- (40) Vesalio Creek 6-N
- (41) Atkman Creek 6-N
- (46) Pipe Creek 11-Q
- (49) Upper Patoka River 8-O
- (51) Salamonie River 12-G
- (52) Big Creek 4-P
- (53) Upper Vernon Fork 11-L
- (54) Lower Vernon Fork 11-N
- (55) Deep River 6-C
- (57) Little Pine Creek 8-G
- (62) White Creek 10-L
- (63) Upper Mississinewa River 12-H
- (64) Lower Mississinewa River 11-G
- (65) Cedar Creek 12-C
- (68) Coal Creek 6-H
- (69) Indian Creek 9-O [4] Little Indian Creek]
- (70) Casselberry Creek 4-Q
- (71) Brulette's Creek 5-J
- (72) Black River 4-P
- (75) Mclynry Creek 7-K
- (76) Pigeon River 12-B
- (77) Honey Creek 6-K
- (79) Upper Big Flotlock 11-J
- (80) Losi Creek 6-K
- (83) Buckeye-Hoosier-Wabash River 13-G
- (84) Silver Creek 10-N
- (85) Windy Creek 7-D
- (88) Blue River 9-O
- (89) White Lick Creek 8-I
- (91) Spungo Creek 8-H
- (93) Hous-Baile Ditch 8-D
- (94) Gordon Creek 10-D
- (95) Birch Creek 6-K
- (96) Marie Dolame 13-D
- (97) St. Joseph of the Maumee 13-B
- (98) Black Creek 6-L
- (99) Pony Creek 10-E
- (100) Goose Creek 9-F
- (101) Clear Creek 11-E
- (102) Blood Run 7-B
- (104) Mill Creek-LaPole 7-B
- (105) Charley Creek 10-E
- (106) Bowman Creek 9-B
- (108) Lower Yellow River 8-D
- (109) Upper Yellow River 9-C
- (111) Robbins 8-C
- (113) Minxville Run 7-F
- (115) Killbuck Creek 11-H
- (116) Mockor Ditch 7-C
- (117) Gullen River 8-B
- (118) Gas Creek 11-K



WATERSHED STATUS CHARTS

The following charts show the status of Public Law 566 watershed projects as of September 30, 1976.

LEGEND

<u>Appl. No.</u>	Number assigned to the application by the Indiana Natural Resources Commission.
<u>Application Approved</u>	Date application was approved by the Commission
<u>Structural Measures</u>	Ch - Channel work SP - Single-Purpose Floodwater Retarding Structure MP - Multiple-Purpose Floodwater Retarding Structure WS - Water Supply
	M&I - Municipal and Industrial Water Supply
	Rec - Recreational Facility Fac

EIS

Environmental Impact Statement

1. Environmental assessment underway to determine whether an EIS or a negative declaration will be required.
2. EIS underway
3. EIS completed
4. Negative declaration completed.

Other Abbreviations

CD - Conservancy District
CEQ - Council on Environmental Quality
LT - Land Treatment
Suppl - Supplements to the work plan

Status as of September 30, 1976

Appl. No.	Watershed Name	Location (County(ies))	Tributary of	Size (Ac.)	Structural Measures			EIS			Remarks and Notes
					Planned	Completed	Other	SP	MP	Other	
(41) Aikman Ck	Davies	E. Fk. White Rvr	20,783	5/61 ---	10/62	11/62					Planning assistance terminated
(38) Anderson Rvr	Perry, Dubois, Spencer & Crawford	Ohio Rvr	97,174	9/60 1/68	8/67	10/67		46	2 Rec. Fac., 2 M&I Fac	3 & 11 mi. Ch	Awaiting Cong. approval
(36) Bachelor Run	Carroll & Howard	Deer Ck	23,519	5/60	8/64	11/61	4/62	4/64	2* ---	21 mi. Ch	3 Est. Comp. FY78 Supplements - 2
(90) Bailey-Cox-Newton	Starke	Kankakee Rvr	11,500	8/67	10/72	2/69	5/75	9/76	1 Pump Plant, 26.2 mi Ch,**	14 mi. Ch	4 ^{1/2} Est. Comp. FY82
(14) Barnard Ditch	Jasper	Kankakee Rvr	54,476	10/58	---	3/63					3 Est. Comp. FY82
(52) Big Creek	Gibson, Posey & Vanderburgh	Wabash Rvr	162,796	8/62 ---	4/64						Appl. canceled
(34) Big Pine	White, Benton & Warren	Wabash Rvr	112,000	5/60 ---	4/63						Inactive
(59) Big Raccoon Ck	Montgomery, Parke, Putnam, Boone & Hendricks	Wabash Rvr	133,120	12/62	8/66	4/64	5/65	4/69	15 mi. Ch & 4 Pub. access sites	2 Pub. access sites	Court decision to dissolve CD pending.
(95) Birch Ck	Clay	Eel Rvr	42,880	5/68							1 Inactive
(98) Black Ck	Greene, Knox & Sullivan	W. Fk. White Rvr	89,472	11/68		1/72					Unfeasible
(72) Black Rvr	Gibson & Posey	Wabash Rvr	60,000	11/63							Inactive
(102) Blood Run	LaPorte, IN	Gallen Rvr	4,400	10/69		1971					Unfeasible
(88) Blue River	Washington, Floyd, Harrison & Clark	Ohio Rvr	125,000	11/66							Inactive
(6) Boggs Ck	Martin & Daviess	E. Fk. White Rvr	20,800	7/55 2/	---	11/56	8/59	2 ---	8 mi. Ch	2 ---	Comp. FY65. Total cost \$700,788

*2 Grade Stabilization Structures

**4 structures for water control and 14 acre-area for spawning

1/Negative Declaration on 8 mi. of channel filed with CEO, June 1975.

2/Sponsor - Boggs Ck Maintenance Dist.

Status as of September 30, 1976

Status as of September 30, 1976

Status as of September 30, 1976

Appl. No.	Watershed Name	Location (County(ies))	Tributary Cf	Size (Ac.)	Structural Measures			EIS (1,2,3,4)			Remarks and Notes
					Planned SP	Completed MP	Other	SP	MP	Other	
(57) Little Pine Ck	Tippecanoe, Warren & Benton	Wabash Rvr	34,000	12/62							Appl. canceled
(42) Little Raccoon Ck	Montgomery, Parke & Putnam	Big Raccoon Ck	98,306	7/61	5/65	6/62	8/63	9/65	13	3	2 Rec Fac 43 mi. Ch
(37) Little River	Huntington, Allen, Wells & Whitley	Wabash Rvr	183,600	10/60	---	6/63	9/63				Planning assistance terminated
(60) Little Walnut Ck	Putnam & Parke	Big Walnut Rvr	41,4225	12/62	2/67	7/65	12/66	4/69	2	1	3 Suppl. Comp. FY78
(23) Little Wea	Tippecanoe & Montgomery	Big Wea Ck	11,960	3/59	1/63	12/61	3/62	9/62	9 mi. Ch		1 Est. Project Comp
(12) Log Lick Ck	Switzerland	Ohio Rvr	15,000	2/58							--- Comp. FY67, Total Cost - \$382,314
(13) Long-Amstutz Ditch	Adams	Wabash Rvr	3,200	10/58							Unfeasible
(80) Lost Ck	Vigo	Wabash Rvr	17,100	6/65							Appl. canceled
(31) Lost River	Orange, Martin, Washington, Lawrence & Dubois	E. Fk. White Rvr	233,690	5/60	10/66	7/63	1/66	9/70	8	2	Inactive
(82) Lye Ck Drain	Montgomery	Lye Ck	12,900	6/65	3/	6/68	11/71	6/75	11 mi. Ch		2/ Est. Comp. FY80
(116) Machler Ditch	LaPorte	Kankakee Rvr	36,400	1/72							3/ Suppl. Comp. 4/76
(19) Mariah Ck	Knox & Sullivan	Wabash Rvr	55,000	12/58							Inactive
(96) Marie Delarme	Allen, DeKalb, IN & Defiance, & Paulding, OH	Maumee Rvr	17,728	10/68							-Planning by Ohio
(113) Maxwell Drain	Carroll & Tippecanoe	Wabash Rvr	5,500	1/71							Inactive

1/Negative Declaration filed on remaining channel work 5/76.
 2/Revised EIS filed with CEQ 4/76.
 3/Sponsor - Montgomery County Drainage Board

Status as of September 30, 1976

App. No.	Watershed Name	Location (County(ies))	Tributary of	Size (Ac.)	Structural Measures			EIS			Remarks and Notes
					Planned	Completed	SP MP Other	SP MP	Other	(1,2,3,4)	
(75)	McIntyre Ck	Clay	Eel Rvr	7,000	5/64	-	-	-	-	-	Inactive
(15)	Middle Fk. Anderson Rvr	Perry & Crawford	Ohio Rvr	69,400	10/58	12/59	3/59	8/61	2	4	12 mi. Ch
(27)	Middle Fk. Salt Ck	Brown & Bartholomew	Salt Ck	46,000	7/59	-	-	-	-	-	Unfeasible
(32)	Mill Ck	Hendricks, Owen Morgan & Putnam	Eel Rvr	187,136	5/60	4/67	7/62	10/65	12	2	52 mi. Ch
(50)	Mill Ck- Fulton	Fulton & Pulaski	Tippecanoe Rvr	34,080	6/62	12/65	11/63	2/64	4/65	-	16 mi. Ch
(104)	Mill Ck- LaPorte	Kankakee Rvr	Kankakee Rvr	34,000	10/69	-	-	-	-	-	1 To be serviced
(63)	Upper Mississinewa	Delaware, Jay, Randolph, IN & Darke, OH	Wabash Rvr	218,500	4/63	-	-	-	-	-	Planning assis- tance terminated
(64)	Lower Mississinewa	Grant, Jay, Dela- ware & Blackford	Wabash Rvr	225,815	4/63	-	-	-	-	-	Planning assis- tance terminated
(39)	Muddy Fk. Silver Ck	Clark, Floyd & Washington	Silver Ck	42,642	5/61	8/65	9/62	1/63	3	4	Rec Fac, & I Outlet, & 13 mi. Ch
(110)	New Waverly- Williams Ck	Cass	Wabash Rvr	3,053	9/70	-	-	-	-	-	1 To be serviced
(81)	Otter Ck	Vigo, Clay & Parke	Wabash Rvr	82,160	6/65	---	7/70	-	-	-	1 To be serviced
(22)	Pigeon Ck	Vanderburgh, Warrick & Gibson	Ohio Rvr	230,000	4/59	---	3/64	-	-	-	Inactive
(76)	Pigeon Rvr	Steuben	St. Joseph Rvr	81,390	10/64	7/69	12/67	-	-	-	Inactive
(46)	Pipe Ck	Madison, Delaware & Hamilton	W. Fk. White Rvr	185,000	9/61	---	4/64	-	-	-	Unfeasible

Status as of September 30, 1976

Appl. No.	Watershed Name	Location (County(ies))	Tributary cf	Size (Ac.)	Structural Measures			EIS (1,2,3,4)		Remarks and Notes
					SP	Planned MP	Completed Other	SP	MP	
(99) Pony Ck	Huntington, Wabash & Whitley	E. Fk. White Rvr	21,500	1/69						Inactive
(3) Prairie Ck	Daviess & Martin	E. Fk. White Rvr	88,690	9/54	2/59	3/56	10/55	5/58	10	15mi. Levees *47 mi. Ch
(35) Prairie Ck-Vigo	Vigo	Wabash Rvr	19,095	5/60	12/64	8/62	10/62	8/64	3	15mi. Levees *47 mi. Ch
(73) Prides Ck	Pike	White Rvr	9,213	11/63	8/65	7/64	10/64	10/66	2	15mi. Levees *47 mi. Ch
(111) Robbins	Starke, St. Joseph, LaPorte & Marshall	Kankakee Rvr	58,680	11/70						Inactive
(66) Rock Ck-Cass	Cass & Carroll	Wabash Rvr	56,533	4/63	9/67	4/67	7/67	7/69	15 mi. Ch	3/2 Suppl. Comp. Est. Comp. FY77
(56) Rock Ck-Weils	Weils & Huntington	Wabash Rvr	61,020	12/62	3/66	10/65	1/66	3/67	27 mi. Ch	2 Suppl. Comp. Est. Comp. FY77
(97) St. Joseph of the Maumee	Steuben, IN, Williams, OH & Branch & Hillsdale, MI	Maumee Rvr	249,000	10/68						Const. Comp. LT measures continuing
(51) Salamonie Rvr	Jay, Wells & Blackford	Wabash Rvr	162,378	8/65	---	3/65	2/67			Planning Assistance terminated
(84) Silver Ck	Clark, Floyd & Scott	Ohio Rvr	97,800	1/65	---	3/72				Inactive
(78) Snapp-Kelso	Knox	Wabash Rvr	16,000	4/65	---					1 To be serviced
(91) Splinge Ck	Vigo & Clay	Eel Rvr	27,570	9/68	---					Inactive
(9) Spring-Run-Griesel	Lake	Singleton Ditch	18,500	7/57	---					App1. canceled
(18) Stucker Fk.	Scott, Clark, Jefferson & Washington	Muscatatuck Rvr	117,850	1/59	4/64	12/60	6/61	9/62	16	4 mi. Ch
										284 ⁴ /Suppl. Comp. - 4 Est. Comp. FY77

*plus 10 grade stabilization structures

¹/EIS on remaining work filed with CEQ, 12/75.

²/Questionable future because of surface mining.

³/EIS on remaining work will be filed with DEQ, 10/75.

⁴/Negative Declaration filed for Structures 13 & 16.

EIS will be prepared for remaining work.

Status as of September 30, 1976

App. No.	Watershed Name	Location (County(ies))	Tributary cf	Size (Ac.)	Structural Measures			EIS (1,2,3,4)	Remarks and Notes
					Planned	Completed	Other		
(21)	Turman Ck	Sullivan	Wabash Rvr	70,000	1/59	7/65	11/65		Appl. canceled
(17)	Turtle Ck	Sullivan	Wabash Rvr	24,540	12/58	----			Planning assistance terminated
(48)	Twin-Rush Ck	Washington	E. Fk. White Rvr	28,099	6/62	8/64	12/63	2/64	Supplements - 3 Est. Comp. FY78
(58)	Upper Big Blue Rvr	Henry & Rush	E. Fk. White Rvr	124,000	12/62	3/65	11/65	4/65 2 1 Rec Fac & 10 mi. Ch	284* Est. comp. FY80 Supplements - 1
(79)	Upper Big Flat Rock	Rush, Henry & Fayette	E. Fk. White Rvr	135,000	5/65				Inactive
(53)	Upper Vernon Fork	Decatur, Ripley & Jennings	Muscatatuck Rvr	126,444	9/62	10/67	1/66	5/66	Planning assistance terminated
(54) (54)	Lower Vernon Fork	Jackson & Jennings	Muscatatuck Rvr	139,005	9/62	10/67	1/66	7/66	Planning assistance terminated
(40)	Yeale Ck	Daviess	W. Fk. White Rvr	24,516	5/61	----	6/65	8/65	Planning assistance terminated
(7)	West Ck	Lake, IN Wells & Kankakee, IL	Singleton Ditch	36,086	4/56	12/63	11/56	12/59	Closed Out
(61)	W. Boggs Ck	Daviess & Martin	Boggs Ck	14,030	2/63	1/	6/65	8/65 10/66 1 Rec Fac & 5 mi. Ch	Est. Comp. FY77
(62)	White Ck	Jackson, Brown & Bartholomew	E. Fk. White Rvr	64,360	3/63				Inactive
(89)	White Lick Ck	Boone, Morgan, Marion & Hendricks	W. Fk. White Rvr	182,503	5/67				Inactive
(44)	Whitewater Rvr-Fayette	Fayette	Miami Rvr, OH	134,160	10/61	8/68	2/66	9/68	Court decision to dissolve CD pending
(45)	E. Fk. Whitewater Rvr	Wayne, Union, Fayette, Randolph, Franklin & Preble, OH	Miami Rvr, OH	246,900	10/61	8/68	2/64	12/67 10/74 1 5 1 Ch Rec Dev. & 20 mi. Ch	Court decision to dissolve CD pending

Status as of September 30, 1976

App. No.	Watershed Name	Location (County(ies))	Tributary cf	Size (Ac.)	Structural Measures			EIS (1,2,3,4)			Remarks and Notes
					Planned SP	Completed MP	Other	SP	MP	Other	
(43)	Upper W. Fl. Whitewater Rvr	Fayette, Randolph, Wayne & Henry	Miami Rvr, OH	243,490	10/61	8/68	2/66	4/68			Court decision to dissolve CO pending
(85)	Windy Ck	Perry	Ohio Rvr	5,920	11/65						Unfeasible
(108)	Lower Yellow Rvr	Starke & Marshall	Kankakee Rvr	87,452	9/70						Unfeasible
(109)	Upper Yellow Rvr	Marshall, St. Joseph, Elkhart & Kosciusko	Kankakee Rvr	185,300	9/70						Unfeasible

BACHELOR RUN PROJECT
CARROLL & HOWARD COUNTIES
FY 1976

The Project in Brief. Authorized - April 24, 1964. Estimated completion - in the fiscal year 1978. Area - 23,519 acres. Sponsors - Bachelor Run Conservancy District and Carroll County Soil and Water Conservation District. Estimated total cost - \$869,516 (\$460,139 PL-566 and \$409,377 Other). Principal problems - floodwater and detrimental effects of excess water on the surface and internal drainage of agricultural land and flooding in the town of Flora. Landownership and use - 60 percent owner-operated; 40 percent tenant-operated; 21,000 acres cropland, 600 acres grassland, and 1,000 acres woodland.

Progress in Land Treatment. Landowners involved - 195 farms, of which 171 are cooperators; 161 have basic conservation plans. Emphasis during the past seven years has been on planning and installing group projects. The application of group land treatment work has been dependent on securing an adequate drainage outlet which is being provided by the main channel reconstruction. Estimated cost of land treatment - \$281,916, of which \$40,037 is for technical assistance.

Progress in Structural Measures. The first unit of construction was completed in October 1968 (4.1 miles of channel work). To date, 13.4 miles of channel work, two grade stabilization structures, a pumping plant, and 2,000 feet of open channel have been completed; 5.8 acres of wildlife plantings have also been completed in connection with related structural measures. Construction on the next 4.2 miles of channel work will resume as soon as easements are secured and funds are available. Total structural measures include the two grade stabilization structures, the pumping plant, 2,000 feet of open channel, and 20.6 miles of channel work. Estimated cost of structural measures - \$587,600 (\$424,534 PL-566 and \$163,066 Other).

Progress in Obtaining Easements and Rights-of-Way. The Bachelor Run Conservancy District is presently working to obtain easements for the next unit of work (4.2 miles of channel work). Difficulty of securing easements has resulted from environmental mitigation requirements.

Effectiveness of Project Proved. The channel work completed to date has effectively contained all storm flows. This includes storms of up to 4 inches of rainfall which have occurred over the watershed. The completed channel has also provided an adequate outlet for the storm sewers of the town of Flora and for several other previously poorly drained areas. Little flooding has occurred in these areas since the channel was reconstructed. The reconstructed channel is providing a good outlet for agricultural drainage. Fewer crop damages are evident. Wildlife is abundant in the reconstructed portions of the channel. A different type habitat (more grassland) has induced a greater variety of small game.

BAILEY-COX-NEWTON PROJECT
STARKE COUNTY
FY 1976

The Project in Brief. Authorized - September 1976. Estimated completion in the fiscal year 1982. Area - 12,070 acres (11,870 acres privately owned, 200 acres owned by Starke County Airport Authority). Sponsors - Starke County Soil and Water Conservation District and the Bailey-Cox-Newton Conservancy District. Total estimated cost - \$1,470,560 (\$675,450 PL-566 and \$795,110 Other). Principal problems - floodwater damage, inadequate land and water management, erosion, inadequate drainage and droughty soil conditions. Landownership and use - 9,910 acres cropland; 390 acres pastureland; 480 acres woodland, and 1,290 acres of other land.

Progress in Land Treatment. Of the approximately 107 farms, 28 landowners have agreements with the Starke County Soil and Water Conservation District. Of these 22 have conservation plans. Major conservation practices planned are conservation cropping systems, crop residue use, drainage mains or laterals, drainage field ditches, grade stabilization structures, minimum tillage, subsurface drains, and stripcropping. Total estimated cost of land treatment - \$338,670 of which \$33,830 is for technical assistance.

Progress in Structural Measures. Structural measures consist of 26.2 miles of multiple purpose flood prevention and drainage work (19.0 miles of deepening and/or enlargement and 7.2 miles of selective cleaning only), 6,900 lineal feet of dike, a pump station at the watershed outlet, 14 structures for water control, and a 14-acre area for spawning. No structural measures have been started. Estimated cost of structural measures - \$1,098,060 (\$655,720 PL-566 and \$442,340 Other).

Progress in Obtaining Easements and Rights-of-Way. The original application for the Bailey-Cox-Newton Conservancy District was approved by the Indiana Natural Resources Commission on May 15, 1972. Easements and rights-of-way to perform planned structural measures will be provided or acquired by the Conservancy District.

BIG RACCOON CREEK PROJECT
MONTGOMERY, PUTNAM, BOONE, PARKE & HENDRICKS COUNTIES
FY 1976

The Project in Brief. Authorized - April 1, 1969. Estimated completion - undetermined. Area - 133,120 acres. Sponsors - Montgomery, Putnam, Parke and Boone soil and water conservation districts and Big Raccoon Creek Conservancy District. Estimated total cost - \$4,601,359 (\$1,835,617 PL-566 and \$2,765,742 Other). Principal problems - flooding damages to crops, pastures, roads and bridges, urban properties, and flood plain land. A large storm causes flooding of up to 4,840 acres. Landownership and use - privately-owned except for Mansfield Reservoir (Corps of Engineers structure in the watershed area), which has 5,115 acres of federally-owned land, and Raccoon Creek recreational area which has 200 acres of state-owned land; 95,086 acres cropland, 20,235 acres grassland, 13,998 acres woodland and 3,801 acres other land.

Progress in Land Treatment. Landowners involved - 800 farms averaging 166 acres; 48 percent of landowners are district cooperators and 37 percent of landowners have basic conservation plans. An estimated 49 percent of necessary land treatment has been accomplished. Planned land treatment measures include conservation cropping systems, grassed waterways, ponds, grade stabilization structures, diversions, crop residue use, pasture planting, woodland protection and installation of open and closed drains. Estimated cost of land treatment - \$4,165,595, of which \$472,226 is for technical assistance and soil survey.

Progress in Structural Measures. Planned structural measures are 6 multiple-purpose structures for flood prevention and public recreation, 1 single-purpose fish and wildlife structure, 1 single-purpose flood prevention structure, 2.3 miles of single-purpose channel work for flood prevention, 12.5 miles of single-purpose fish and wildlife channel work and 4 access sites for fishing and boating. Estimated cost of structural measures - \$2,435,764 (\$1,427,942 PL-566 and \$1,007,822 Other). Two public access sites have been developed and are in public use.

Progress in Obtaining Easements and Rights-of-Way. The Conservancy District was established by the Putnam County Circuit Court on August 11, 1966. The Conservancy District Plan was approved by the court on November 5, 1969. Land rights maps have been prepared by the SCS for 4 multiple-purpose structures and 2 stream access sites. Opposition to the Conservancy District and the watershed plan developed. No effort is being made by the Conservancy District Directors to acquire land rights. Proponents of the project initiated court action to mandate positive action by Conservancy District Directors. Mandate was secured and appeal by Conservancy District Directors is pending.

BUSSERON PROJECT
SULLIVAN, VIGO, CLAY & GREENE COUNTIES
FY 1976

The Project in Brief. Authorized - June 1958. Estimated completion - in the fiscal year 1979. Area - 153,000 acres (all privately-owned except approximately 1,726 acres state-owned in Shakamak Park and 1,177 acres in Sullivan County Park and Lake.) Sponsors - Sullivan, Clay, Greene and Vigo county soil and water conservation districts, Indiana Department of Natural Resources, Busseron Conservancy District and Sullivan County Park and Recreation Board. Principal problems - floodwater and sediment damage to agricultural lands, state and county roads and bridges, utilities, and pollution from strip mines. Landownership and use - 11.9 percent tenant operated; 82,940 acres cropland - 54.1 percent, 20,470 acres grassland - 13.4 percent, 18,190 acres woodland - 11.8 percent, 7,230 acres idle - 4.2 percent, 24,450 acres miscellaneous - 16 percent (includes extensive strip mines in area).

Progress in Land Treatment. Approximately 450 farms in watershed. Goal for district cooperators has been exceeded. Completion of conservation plans is in line with planned accomplishments. The goals for terracing and tiling have been achieved. Progress in agronomic practices is being made. Progress is also being made in erosion control practices.

Progress in Structural Measures. Twenty of the planned 26 structures have been completed at a PL-566 cost of \$1,509,672. Two were multi-purpose recreation and flood control structures. Expansion of recreation facilities on both multi-purpose structures was completed this year. Additional new camp sites are to be installed at Lake Sullivan this year. Eight and eight-tenths miles of planned 53 miles of channel have been completed at a PL-566 cost of \$65,294. The Conservancy District has another single purpose structure under construction. This structure is approximately 75 percent complete.

Progress in Obtaining Easements and Rights-of-Way. The total cost of land easements and rights-of-way for the completed structures, two recreation facilities and 8.8 miles of channel was \$566,991 of which \$231,294 was PL-566. A Farmers Home Administration loan docket for long-range financing has been funded. Part of the first phase of this loan, in the amount of \$158,200, was used by the Conservancy District to obtain land rights on Structure F-1.

Case Histories of Watershed Project Benefits.

Flood Damage Reduction. The 20 installed structures helped control flooding that would have otherwise occurred. After heavy rains fell, clear water was noted to run from many of the mechanical spillways of the structures.

continued next page

Busseron Project

Recreation. The use of the Sullivan County Park and Lake is continuing to increase. The energy crisis has not curtailed the camping activities this year. One 65-acre home development with sewer and water facilities shows steady growth which enhances the local tax base. Local businesses are enjoying an increase in sales from tourists and campers. The multi-purpose structure at Shakamak State Park is an excellent facility. The recreation potential has been greatly increased.

Fish and Wildlife. Fishing reports from the two multi-purpose structures have been excellent. Good catches of bass, crappie, bluegill and channel catfish have been reported this year. Wild ducks are seen on the lake many months of the year.

Local Reaction. The overall reaction is positive. Many local citizens are enjoying the benefits of the watershed project as well as the visitors.

Economics. It is interesting to note that the lake is paying for itself if the loan repayment is not taken into effect. This excludes the income from the increased tax base around the lake. Most of the houses there range between \$50,000 and \$100,000.

DELANEY CREEK PROJECT
WASHINGTON COUNTY
FY 1976

The Project in Brief. Authorized - April 1, 1969. Estimated completion in the fiscal year 1977. Area - 21,905 acres of which approximately 70 percent are privately-owned. Sponsors - Washington County Soil and Water Conservation District, Delaney Creek Conservancy District, Washington County Park and Recreation Board, and the Indiana Department of Natural Resources Division of Forestry. Estimated total cost of construction - \$1,480,190 (\$1,108,353 PL-566 and \$371,837 Other). Due to the original plan being revised at present, these costs will change. Principal problems are floodwater damage and land scour to farmland and roads. Landownership and use - 3,285 acres of cropland, 1,095 acres of grassland, 16,667 acres of woodland, and 970 acres - idle and miscellaneous.

Progress in Land Treatment. There are 126 farms in the watershed, of which 64 are cooperators, covering 15,084 acres. Sixty-two cooperators have basic conservation plans on 14,250 acres. The conservation practices to be installed include improved rotations, grassed waterways, diversions, gully stabilization, pasture renovation, tree planting, and improved forestry practices.

Progress in Structural Measures. Of the original five planned structures all have been completed. However, there will be seven additional structures planned to reduce need for channel work.

Progress in Obtaining Easements and Rights-of-Way. The County Park and Recreation Board has obtained land rights on Structure No. 5. The Conservancy District will proceed on land rights when supplemental plan is finalized.

FALL CREEK PROJECT
WARREN COUNTY
FY 1976

The Project in Brief. Authorized - November 26, 1973. Estimated completion - in fiscal year 1980. Area - 4,850 acres. Sponsors - Warren County Soil and Water Conservation District, Williamsport Board of Parks and Recreation and the Williamsport Town Board. Estimated total cost - \$674,060 (\$133,600 PL-566 and \$540,460 Other). Principal problems - upland erosion, stream bank erosion, flooding, and lack of recreational facilities. Landownership and use - 98 percent of the land is privately owned and 2 percent of the land is owned by units of city and county government; 57 percent of the watershed is cropland, 25 percent pastureland, 5 percent forest land, 4 percent wildlife and recreation land, and 9 percent other land. The estimated population of the watershed is 1,770, of which 6 percent live on farms.

Progress in Land Treatment. Landowners involved - 33 farms wholly or partially in the watershed; 22 of the landowners (involving 80 percent of the watershed area) are cooperators and 18 have conservation plans. An estimated 65 percent of the needed land treatment measures have been applied. Planned land treatment includes conservation cropping systems, crop residue management, minimum tillage, grassed waterways, grade stabilization structures, pasture planting and management, wildlife habitat management, etc. Estimated cost of land treatment - \$43,830, of which \$10,175 is for technical assistance.

Progress in Structural Measures. Planned structural measures are one multiple-purpose flood prevention-recreation structure with associated recreation facilities and 150 feet of streambank protection in Williamsport. Plans are underway to complete the streambank protection work in FY 1977. Geological investigations and field surveys for the multiple-purpose structure have been completed. Estimated cost of structural measures - \$630,230 (\$125,840 PL-566 and \$504,390 Other).

Progress in Obtaining Easements and Rights-of-Way. Land rights maps for the multiple-purpose structure have been prepared by the Soil Conservation Service and furnished to the sponsors. The sponsors are working with the Indiana Department of Natural Resources, the Department of Housing and Urban Development and the Farmers Home Administration to secure needed grants and loans to finance the local costs of the project.

HALL-FLAT CREEK PROJECT
DUBOIS COUNTY
FY 1976

Project in Brief. Authorized in September 1976. Estimated completion - in fiscal year 1984. Area - 43,107 acres. Sponsors - Hall-Flat Creek Conservancy District and Dubois County Soil and Water Conservation District. Estimated total cost - \$2,912,127 (\$2,170,790 PL-566 and \$741,337 Other). Landownership and use - 94 percent owner-operated; 6 percent tenant-operated; 16,000 acres cropland, 10,000 acres woodland, 13,000 acres grassland. Principal problems - flood-water damage to crops, pastures, other agricultural properties, roads and bridges. These damages are associated with storms which generally occur two to three times per year. Sheet erosion occurs throughout the upland areas and accounts for 98 percent of total erosion in the watershed. Approximately 87 percent of the watershed soils have erosion hazards. Some minor channel fill occurs through sediment damage and some overbank deposits may be found. Approximately 70 percent of the watershed flood plain soils are imperfectly drained which limits production. Increased pressure for food production has resulted in a tendency of watershed landowners to crop erosion prone slopes beyond their capabilities resulting in excessive erosion.

Progress in Land Treatment. Landowners involved - 310, of which 126 are cooperators and 61 have basic conservation plans. Considerable channel work for improved drainage outlets has been done on individual farms. Estimated cost of land treatment - \$562,217, of which \$177,056 is for technical assistance.

INDIAN CREEK PROJECT
MORGAN, JOHNSON, BROWN & MONROE COUNTIES
FY 1976

The Project in Brief. Authorized - August 31, 1966. Estimated completion - undetermined. Area - 59,160 acres. Sponsors - Morgan, Johnson, Brown and Monroe county soil and water conservation districts. Estimated total cost - \$3,208,500 (\$1,204,499 PL-566 and \$2,004,001 Other). Principal problems - erosion and drainage problems in the uplands, flooding and drainage problems in the bottomlands, and water management problems throughout the watershed. Additional recreational facilities are also needed. Landownership and use - 3,685 acres state-owned land (no federally-owned land), balance privately-owned; 22,170 acres cropland, 9,570 acres pastureland, 20,990 acres woodland, and 6,430 acres miscellaneous.

Progress in Land Treatment. Landowners involved - 600 farms averaging 90 acres; approximately 51 percent of the land is now under district cooperative agreement. Approximately 63 percent of the cooperators now have basic conservation plans on 27 percent of the total area in the watershed. Land treatment measures to be installed are those having the most hydrologic, erosion and sediment control significance in reducing floodwater damage and those which contribute to achieving agricultural water management benefits. Total estimated cost of land treatment - \$1,102,000, of which \$340,480 is for technical assistance.

Progress in Structural Measures. Planned structural measures are 8 floodwater retarding structures and 2 multiple-purpose structures (including basic recreation facilities). No structural measures have been installed. Land rights maps will be developed after formation of the conservancy district.

Progress in Obtaining Easements and Rights-of-Way. Petitions for conservancy district formation were filed in Morgan County Circuit Court in December 1967, but later withdrawn by the steering committee. The court refused to reinstate the petitions at a later date. The steering committee has obtained necessary signatures of landowners (plus 30 percent) on new petitions which have been filed with the court. Court proceedings with a special judge from Monroe County are in process. Opposition petitions to the formation of the conservancy district have been filed. The court is currently determining validity of landowner signatures on all petitions filed. The first hearing on the second set of petitions was on April 19, 1973. There has been no action to date on formation of the conservancy district. Land easements and rights-of-way will be obtained following formation of the conservancy district.

LITTLE RACCOON CREEK PROJECT
PARKE, MONTGOMERY & PUTNAM COUNTIES
FY 1976

The Project in Brief. Authorized - September 10, 1965. Estimated completion - in the fiscal year 1977. Area - 98,306 acres. Sponsors - soil and water conservation districts of Parke, Montgomery and Putnam Counties and the Little Raccoon Creek Conservancy District. Estimated total cost - \$4,444,720 (\$2,891,970 PL-566 and \$1,552,750 Other). Principal problems - damage to crops and pastures from flooding, land damage in the flood plain, upland erosion and lack of recreational facilities. Landownership and use - 65 percent owner-operated, 35 percent tenant-operated; 66,523 acres cropland, 9,240 acres pastureland, 16,750 acres woodland and 5,793 acres - other land.

Progress in Land Treatment. Landowners involved - 609. Approximately 90 percent of the total area is under district cooperator agreement of which about 70 percent is under conservation plan. Major practices planned are pasture planting, ponds, diversions, waterways, conservation crop systems, crop residue use, tile, open drains and woodland improvement. Approximately 85 percent of the needed land treatment measures has been completed. Land treatment measures were needed on 23,125 acres cropland, 4,200 acres grassland, 9,390 acres woodland and 1,830 acres other land. Estimated cost of land treatment - \$755,385, of which \$317,995 is for technical assistance.

Progress in Structural Measures. Sixteen structures (13 single-purpose, 2 multiple-purpose flood prevention-public recreation and 1 multiple-purpose flood prevention-private recreation) and 2 recreational facilities are completed. Multiple-purpose structure No. 8 with a 360-acre permanent pool and associated recreation area with facilities was opened to the public on Memorial Day weekend in 1972. Recreation facilities are operated by the Waveland Park Board. Multiple-purpose structure No. 2C, with a 100-acre permanent pool and a 100-acre recreation area, was dedicated May 27, 1973; recreation facilities are operated by the Parke County Park Board. Both are receiving wide usage. Remaining structural measures include 43 miles of limited channel work. A further study of channel work was made during the last half of 1975. Bids should be let in the fall of 1976 for identified channel debris block removal. Estimated cost of structural measures - \$3,689,340 (\$2,704,380 PL-566 and \$984,960 Other).

Progress in Obtaining Easements and Rights-of-Way. The Conservancy District has acquired the necessary easements for the first phase of the channel work.

Effectiveness of Project Proved. In June 1973 a storm brought from 3 to 5 inches of rain in a short period of time. All 11 structures functioned as planned and effectively protected several thousand acres

LITTLE RACCOON CREEK PROJECT

of corn, beans and small grain from serious flooding. Structure 2C, which controls only about one-half of the drainage area above Pioneer Village (Billie Creek), also protected the village from the extensive damage which would likely have occurred without the dam. The village was also spared two other serious floods: once in late July 1971 when the structure was only partially completed and a 4.5-inch rain fell in about an hour and also in June 1972 when a 2.5-inch rain fell in 30 minutes. No serious flooding has occurred in the valley in the past 7 years. Farmers are now planting crops with no fear of crop loss from floods, and flood damage to roads, bridges and homes has been practically eliminated.

LITTLE WALNUT CREEK PROJECT
PUTNAM & PARKE COUNTIES
FY 1976

The Project in Brief. Authorized - April 1969. Estimated completion - in the fiscal year 1978. Area - 41,225 acres. Sponsors - Putnam County Soil and Water Conservation District and the Little Walnut Creek Conservancy District. Estimated total cost - \$2,020,751 (\$1,170,541 PL-566 and \$850,210 Other). Principal problems - damage from flooding to crops and pastures, roads and bridges, and damage from scour and sediment deposition in the flood plain. Landownership and use - major portion of land is privately-owned and used agriculturally; 50 percent used for cropland, 22 percent for pasture, 25 percent for woodland and 3 percent for other land.

Progress in Land Treatment. Landowners involved - 256 farms wholly or partially within the watershed; 140 of the landowners (involving 33,612 acres) are cooperators with the Putnam County Soil and Water Conservation District and 94 of the landowners have basic conservation plans involving 24,398 acres. An estimated 75 percent of needed land treatment measures have been applied. Planned land treatment includes conservation cropping systems, grassed waterways, ponds, diversions, grade stabilization structures, crop residue use, pasture planting, woodland protection and installation of open and closed drains. Estimated cost of land treatment - \$494,301, of which \$118,670 is for technical assistance and soil surveys.

Progress in Structural Measures. Planned structural measures are two single-purpose floodwater retarding structures and one multiple-purpose flood prevention recreation structure. All structures have been completed. Estimated cost of structural measures - \$1,526,450 (\$1,051,871 PL-566 and \$474,579 Other). Actual cost of project to date has been \$903,734 PL-566 for construction and land rights, and \$674,012 'Other' costs for construction, land rights and operation of the Conservancy District. Additional contracts for fencing and shrub planting will require \$9,893 PL-566 and \$5446 Other.

Progress in Obtaining Easements and Rights-of-Way. The Conservancy District was established by Putnam County Circuit Court on March 10, 1967. The Conservancy District Plan was approved by the Indiana Natural Resources Commission. The Conservancy District has acquired all needed land rights and is currently investigating means to bring about the installation of planned recreation facilities at multiple-purpose structure No. 4. A boat ramp and parking lot have been constructed by the Conservancy District but were not part of the plan.

Effectiveness of Project Proved. Severe rainstorms during 1972, 1973, 1974, 1975 and during spring of 1976 have severely tested the two single-purpose structures completed. Both structures functioned as planned. Flooding was materially reduced and significantly reduced damages to crops, county roads and bridges, and farmland.

LOST RIVER PROJECT
DUBOIS, LAWRENCE, MARTIN, ORANGE & WASHINGTON COUNTIES
FY 1976

The Project in Brief. Authorized September 29, 1970. Estimated completion in the fiscal year 1980. Area - 233,690 acres - 220,325 acres privately-owned, 12,200 acres federally-owned and managed by U.S. Forest Service, 1,125 acres state-owned and managed by the Indiana Department of Natural Resources. Sponsors are the soil and water conservation districts of Dubois, Lawrence, Martin, Orange and Washington Counties, the Lost River-Springs Valley Conservancy District, the Orange County Park and Recreation Board, and the town of Paoli. Estimated total cost for structural measures and land treatment - \$9,979,365 (\$4,662,666 PL-566 and \$5,316,699 Other). Principal problems - floodwater and sediment damage to agricultural lands, increased operating costs and disruption of travel because of road and bridge flooding and damage. Land use - 35 percent cropland, 28 percent pasture, 26 percent woodland, and 11 percent other uses.

Progress in Land Treatment. There are 1,140 farms in the watershed with 623 district cooperators of which 429 have complete conservation plans. An estimated 64 percent of the planned practices have already been applied.

Progress in Obtaining Easements and Rights-of-Way. The Lost River-Springs Valley Conservancy District has had a tax levy for the past four years and has approximately \$180,000 in Certificates of Deposit in local banks within the watershed area. The tax levy was taken off for calendar year 1976.

Present Status. The supplement to the work plan was approved by the State Conservationist and the final environmental impact statement filed with the Council on Environmental Quality in April 1976. The amended District Plan was approved by the Natural Resources Commission in August 1976.

LYE CREEK DRAIN PROJECT
MONTGOMERY COUNTY
FY 1976

The Project in Brief. Authorized - June 6, 1975. Estimated completion - the fiscal year 1980. Area - 13,035 acres. Sponsors - Montgomery County Soil and Water Conservation District and the Montgomery County Drainage Board. Estimated total cost - \$526,540 (\$324,230 PL-566 and \$202,310 Other). Principal problems - inadequate land and water management, floodwater damage, erosion and inadequate drainage. Landownership and use - privately-owned; 11,315 acres crop-land, 891 acres grassland, 129 acres woodland and 700 acres other land.

Progress in Land Treatment. Landowners involved - 100 farms of which 40 are cooperators with the Montgomery County Soil and Water Conservation District. Of these, 22 have basic conservation plans. Major conservation practices planned are contour farming, grassed waterways, minimum tillage, crop residue use, grade stabilization structures, conservation cropping systems, subsurface drains, drainage mains and laterals, pasture and hayland planting and management, tree planting, and forest land management. Total estimated cost of land treatment - \$34,770, of which \$3,340 is for technical assistance.

Progress in Structural Measures. Planned structural measures are 11.3 miles of multiple-purpose flood prevention and drainage channel work, of which 10.2 miles will include deepening and enlargement and 1.1 miles will include only debris removal. All work will be performed on intermittent, manmade or modified channel. No structural measures have been started. Estimated cost of structural measures - \$491,770 (\$320,880 PL-566 and \$170,890 Other).

Progress in Obtaining Easements and Rights-of-Way. The original application for the Armentrout Drain Ditch was approved by the Indiana Natural Resources Commission on June 15, 1965. The amended application for Lye Creek Drain was approved by the Commission on March 1, 1971. Easements and rights-of-way to perform planned structural measures are being acquired by the Drainage Board. The major portion of improvement work will be done within the Board's 75-foot right-of-way established by the Indiana Drainage Code. Additional rights-of-way will be acquired as needed or determined.

MIDDLE FORK OF ANDERSON RIVER PROJECT
PERRY & CRAWFORD COUNTIES
FY 1976

The Project in Brief. Authorized - August 28, 1961. Estimated completion in the fiscal year 1978. Area - 69,400 acres (63,040 acres privately-owned, 5,840 acres owned by U.S. Forest Service, 520 acres owned by Indiana Department of Natural Resources). Sponsors - soil and water conservation districts of Perry and Crawford Counties and the Middle Fork Watershed Conservancy District. Estimated total cost - \$4,446,856 (\$1,590,078 PL-566 and \$2,856,788 Other). Principal problems - floodwater sediment and erosion damage to agricultural lands, and indirect damages in form of depreciation in land values, increased operating costs and disruption of travel because of road and bridge flooding and damage. Landownership and use - 90 percent owner-operated; 18,000 acres cropland, 7,700 acres grassland, 28,000 acres woodland. Over 50 percent are part-time farmers.

Progress in Land Treatment. Over 95 percent of the planned land treatment measures are now applied. There are 350 farmers in the area of which 345 are cooperators. Of the estimated 1,000 acres of tree planting needed on the watershed critical areas, 1,461 acres have been planted. Trees were furnished to the landowners through the RC&D Program. Land treatment was given first priority for REAP cost-share assistance. Over \$125,000 has been spent for REAP assistance since watershed project started.

Progress in Structural Measures. Of the planned 34 miles of channel work, 5 miles of Kraus Creek were completed in 1966. Multiple purpose Lake Celina (155 acres) was completed in 1968. Four other multiple-purpose structures were completed prior to 1968. Recreation facilities have been completed on Saddle Lake by the U.S. Forest Service. Road building and recreation facilities, including beach, have started on Tipsaw. Public access road to Indian Lake and Lake Celina is completed. Campgrounds were opened for use during summer of 1975 on Celina. The 1.3 miles of channel work on Winding Branch and 5.6 miles of Unit 1 of the Middle Fork main channel are complete.

Progress in Obtaining Easements and Rights-of-Way. The Conservancy District has obtained easements for 29 miles of channel work on Middle Fork, Sulphur and Theis creeks.

Effectiveness of Project Proved. The watershed received heavy steady spring rainfall during the spring of 1973 totaling 22 inches and the structures held back the excessive bottomland flow very successfully. Six to 6 1/2 inches of rain in 48 hours April 23-25, 1975, caused both emergency spillways on structures 2 and 4 to flow. Structure No. 7 was within a foot of the lowest spillway. Some flooding occurred but damage was minimal. Construction of Interstate 64 is in progress across the watershed. As necessary cuts and fills are completed areas are seeded and mulched. This amounts to approximately 100 acres of critical area seeding.

MUDY FORK OF SILVER CREEK PROJECT
CLARK, FLOYD & WASHINGTON COUNTIES
FY 1976

The Project in Brief. Authorized - August 12, 1965. Estimated completion - in the fiscal year 1978. Area - 42,642 acres (86 percent privately-owned, 14 percent state forest). Sponsors - Clark, Floyd, and Washington county soil and water conservation districts, Town Board of New Providence, and the Muddy Fork Conservancy District. Estimated total cost - \$2,606,369 (\$1,824,251 PL-566 and \$782,118 Other). Principal problems - floodwater and sediment damage to agricultural lands, residences, and utilities. Landownership and use - 60 percent part-time and 25 percent tenant farmers; general farming with emphasis on fruit and vegetable crops and small grain, 7,751 acres cropland, 2,902 acres grassland, 29,595 acres woodland, and 2,394 acres miscellaneous.

Progress in Land Treatment. Of the approximately 400 landowners, 191 are district cooperators (26,267 acres - 66 percent), and 175 have conservation plans (23,871 acres - 56 percent of the area). Over 80 percent of the land treatment practices have been applied. The following practices are 100 percent applied or over: contour farming, drainage mains and laterals, farm ponds, minimum tillage, pasture and hayland management, pasture and hayland planting, open drains, tile, tree planting, trough or tanks, wildlife habitat management and woodland improved harvesting. The following conservation practices are over 75 percent complete: conservation cropping system, crop residue use and terrace gradient. There are 17,287 acres which are adequately treated (85 percent of the goal). The land treatment program will be installed ahead of schedule. Estimated cost of land treatment is \$314,980.

Progress in Structural Measures. Structures numbered 1, 2, 3 and 5 are completed and operating. Structure No. 1 is a multi-purpose flood control and water supply structure. The structure provides water to the town of New Providence and over 800 customers of the Tri-County Water Corporation. The other structures (2, 3 and 5) are flood control only structures. All structural work has been temporarily halted pending completion of a work plan supplement.

PRAIRIE CREEK PROJECT
VIGO COUNTY
FY 1976

The Project in Brief. Authorized - August 19, 1964. Estimated completion - in the fiscal year 1977. Area - 19,095 acres (99.5 percent privately-owned). Sponsors - Vigo County Soil and Water Conservation District and the Prairie Creek Conservancy District. Total revised cost - \$1,416,342 (\$792,292 PL-566 and \$624,050 Other). Principal problems - floodwater and sediment damage to agricultural lands. Landownership and use - 13,260 acres cropland; 2,440 acres grassland; 1,800 acres woodland and 350 acres idle and miscellaneous.

Progress in Land Treatment. Of the approximately 200 farmers in the watershed, 160 have agreements with the Vigo Soil and Water Conservation District. Of these, 155 have conservation plans. Approximately 90 percent of the major planned land treatment measures have been applied. Estimated cost of land treatment is \$438,656.

Progress in Structural Measures. All three planned floodwater retarding structures have been installed. Structure No. 2 was completed late in 1967; Structure No. 1 was completed in October 1970; and Structure No. 3 was completed in September 1973.

Progress in Obtaining Easements and Rights-of-Way. A Farmers Home Administration loan was received in May 1971. Channel easements are progressing and presently cover 96 percent of the land required.

Effectiveness of Project Proved. Several times during the 1973-74 winter the area received intense rains. Due to channel congestion flooding occurred along the main stem. Floodwaters topped the road at bridges two and three. The flooding of agricultural land was evident during much of February and March. This flooding persisted due to maximum discharge of Structures 1 and 2 with inadequate channel capacity downstream. Even though flooding occurred to agricultural ground, several thousand dollars in benefits were received to county roads and bridges and to landowners as a result of the three floodwater retarding structures.

PRIDES CREEK PROJECT
PIKE COUNTY
FY 1976

The Project in Brief. Authorized - October 1966. Estimated completion - in the fiscal year 1977. Area - 9,213 acres (100 percent privately-owned). Sponsors - Pike County Soil and Water Conservation District and Prides Creek Conservancy District. Estimated total cost - \$1,232,400 (\$775,457 PL-566 and \$456,943 Other). Principal problems - floodwater and sediment damage to agricultural land and recreational development. Land use - 61 percent cropland, 10 percent grassland, 8 percent woodland, 10 percent idle land, 6 percent farmsteads and roads and 5 percent urban.

Progress in Land Treatment. More than 69 percent of the planned land treatment measures have been applied. Of the 92 farmers in the project, 69 are cooperators and 64 have conservation plans. Of the 12,000 feet of diversions needed, 1,500 feet have been constructed. Of the 18,000 feet of field drainage ditch needed, 13,500 feet have been constructed. Of the 23 farm ponds needed, 24 have been constructed. Estimated total cost of land treatment is \$173,600.

Progress in Structural Measures. Structural measures consist of two floodwater retarding and one multi-purpose recreation structures, and 6.2 miles of channel work. Estimated cost of structural measures is \$1,103,000 (\$757,500 PL-566 and \$345,500 Other). The multi-purpose structure and recreation facilities were completed in June 1972. Survey, design and plans have been completed on the two flood retarding structures.

Progress in Obtaining Easements and Rights-of-Way. Land rights maps have been presented to the Conservancy District on all structures and the channel. The Conservancy District purchased 260 acres needed for Structure No. 4 and the recreational facilities. Cost of obtaining easements and rights-of-way has delayed the construction of Structures 1 and 2. Land easement costs have been influenced by surface coal mining operations in the watershed and near Structures 1 and 2. All of Structure No. 1 site has been purchased by coal interests and may be surface mined. The Conservancy District has contacted the coal company to encourage flood control as part of their reclamation work.

Effectiveness of Project Proved. The land treatment phase has helped in controlling erosion and reducing flooding in the watershed. There is a noticeable difference in flooding below Structure No. 4 to the main channel. Part of this area is now an industrial park. Three industries have started operations in this protected area since Structure No. 4 has been completed.

ROCK CREEK PROJECT
CASS & CARROLL COUNTIES
FY 1976

The Project in Brief. Authorized - July 3, 1967. Estimated completion - in the fiscal year 1980. Area-56,000 acres, all privately-owned. Sponsors - soil and water conservation districts of Cass and Carroll Counties, and the Rock Creek Cass-Carroll Conservancy District. Estimated total cost - \$1,818,295 (\$1,257,245 PL-566 and \$567,025 Other). Principal problems - floodwater and drainage damage to agricultural lands. Landownership and use - 17 percent tenant-operated; 46,500 acres cropland, 3,200 acres grassland, 2,500 acres woodland, and 4,400 acres in "other" land.

Progress in Land Treatment. Approximately 15 percent of the planned land treatment measures have been applied. Of the 554 farmers in the watershed, 150 are district cooperators and 132 have resource conservation plans. Of the 265,000 feet of needed tiles, over 97,037 feet have been installed. Estimated cost of land treatment is \$423,985.

Progress in Structural Measures. Construction on Unit I, approximately 1.2 miles of channel work, was completed May 13, 1971. Construction on Reach "M" which includes 2.4 miles of clearing, snagging and minor channel realignment was begun in 1973 and was completed in 1974. This reach is immediately downstream from the PL-566 project and was paid for 100 percent by Conservancy District funds. The total estimated cost of structural measures including installation of services, easements, and rights-of-way is \$1,394,310 for 15.2 miles of channel work. Construction of approximately 1.2 miles of fishway was completed on Unit I in 1974 at a cost of \$49,500.

Progress in Obtaining Easements and Rights-of-Way. All easements have been obtained except on the last unit of construction which is scheduled for completion in 1980. On this last unit, comprising approximately 14 miles of channel work, one landowner has not signed the easement. The Conservancy District chairman and the contracting officer are working to secure the remaining easement.

ROCK CREEK PROJECT
WELLS & HUNTINGTON COUNTIES
FY 1976

The Project in Brief. Authorized - March 16, 1967. Construction completed - September 1975. Land treatment measures continuing. Area - 61,020 acres - all privately-owned. Sponsors - soil and water conservation districts of Huntington and Wells Counties, county commissioners and the Rock Creek Conservancy District. A work plan supplement was completed in 1972 to modify the original work plan to reduce adverse environmental effects of the project as found during the project review. Principal problems - floodwater damage and impaired drainage of agricultural lands. Land use - 52,943 acres of cropland, 1,365 acres of grassland, 3,439 acres of woodland, and 3,273 acres of wildlife and miscellaneous land. Revised estimated total cost - \$2,906,390 (\$1,871,200 PL-566 and \$1,035,190 Other). Actual contract construction costs were \$1,889,159.96 (\$1,701,679.37 PL-566 and \$187,480.59 Other). Major works of improvement include 24.1 miles of channel work on the Rock Creek and Whitelock Drains and 2.5 miles of debris removal on the Mossberg Drain. Supplemental additions to reduce the adverse environmental effects include 14.7 miles of one-sided channel construction, fish pools throughout most of the length of the Rock Creek Main Channel and replanting of approximately 51 acres of trees and shrubs adjacent to the berm.

Progress in Land Treatment. Practically all the erosion control measures planned have been applied. Tile and open drainage with complementary grade stabilization structures remain to be installed as landowners' finances permit. Of the 580 farms in the watershed, 426 are district cooperators with 308 having resource conservation plans. Land treatment measures completed are determined to be adequate for project purposes. It is estimated that the cost of land treatment measures installed to date exceeds \$960,000.

Progress in Obtaining Easements and Rights-of-Way. All needed easements and rights-of-way were obtained through the local court for the entire project at a local cost of \$91,327.38. Court-appointed appraisers determined the value of the needed easements and rights-of-way.

Effectiveness of Project Proved. The largest storm runoff in seven years occurred during the period of February 16-20, 1976. The works of improvement performed as planned with little flood damage to the channel and very minor short duration flooding to bottomlands. No roads were flooded as would have occurred with the preconstruction conditions.

STUCKER FORK PROJECT
SCOTT, JEFFERSON, CLARK & WASHINGTON COUNTIES
FY 1976

The Project in Brief. Authorized - September 28, 1962. Estimated completion - in the fiscal year 1977. Area - 117,850 acres (96 percent privately-owned, 4 percent state forest). Sponsors - soil and water conservation districts of Scott, Clark, Jefferson and Washington Counties, the Stucker Fork Conservancy District and the Indiana Department of Natural Resources - Division of Forestry. Estimated total cost - \$7,284,132 (\$3,293,048 PL-566 and \$3,991,084 Other). Land-ownership and use - more than 90 percent of the farms are owner-operated; 55,793 acres of cropland, 15,294 acres of permanent pasture, 34,000 acres of woodland, and 12,763 acres of idle and miscellaneous.

Progress in Land Treatment. Approximately two-thirds of the land treatment has been accomplished in the watershed area. About 84 percent of the farm area is under basic conservation plan. The area above all structures is about 65 percent district cooperators who are actively applying conservation measures to their land. Estimated cost of land treatment is \$3,395,778.

Progress in Structural Measures. Fourteen structures are completed and 3.5 miles of channel work have been done. One structure is ready for contracting.

Progress in Obtaining Easements and Rights-of-Way. Easements on the remaining structure and channel are to be purchased after the plan is supplemented.

Effectiveness of Project Proved. Project has proven effective in reducing flooding below structures. There were no large storms in the past year.

TWIN-RUSH PROJECT
WASHINGTON COUNTY
FY 1976

The Project in Brief. Authorized - April 29, 1965. Estimated completion - in the fiscal year 1978. Area - 28,099 acres (99 percent privately-owned). Sponsors - Washington County Soil and Water Conservation District, the Twin-Rush Conservancy District, the city of Salem, and the Washington County Park and Recreation Board. Estimated total cost - \$3,047,438 (\$1,628,793 PL-566 and \$1,418,645 Other). Principal problems - floodwater damage and land scour to agricultural lands and roads. Also, inadequate water supply for future growth of Salem. Landownership and use - 5 percent tenant operated; 6,759 acres of cropland; 4,967 acres of grassland; 13,800 acres of woodland and 2,573 acres miscellaneous.

Progress in Land Treatment. Of the 267 farms in the project, 123 are district cooperators (19,702 acres) and 112 have basic plans (16,576 acres). The major conservation practices needed are diversions; grassed waterways; grade stabilization structures; livestock exclusion and pasture planning.

Progress in Structural Measures. Two of the three planned floodwater retarding structures have been completed. Structure No. 2 is a 220 acre lake furnishing water supply to the city of Salem. Incidental recreation will also be provided by the city of Salem. Structure No. 1, a proposed 120 acre lake and recreation development, which was being sponsored by the Washington County Park and Recreation Board, is now changing back to flood prevention only. Local sponsors hope to let construction contract on Structure No. 1 in the fall of 1976.

Progress in Obtaining Easements and Rights-of-Way. The Conservancy District is in the process of acquiring land rights on Structure No. 1.

Effectiveness of Project Proved. Structures numbered 2 and 3 continue to keep channels below them well within their banks. However, to the immediate west of Structure No. 3, where No. 1 is planned, the valley continues to be flooded by the overtopping of streams. Again, frequent flooding this past spring has caused farmers in the area to recognize the urgency of getting this structure in place.

UPPER BIG BLUE RIVER PROJECT
HENRY & RUSH COUNTIES
FY 1976

The Project in Brief. Authorized - August 1966. Estimated completion - in the fiscal year 1980. Area - 124,000 acres (98 percent privately-owned, state-ownership - 1,526 acres or 1.2 percent, and county-ownership - 371 acres). Sponsorship - soil and water conservation districts of Henry and Rush Counties and the Big Blue River Conservancy District. Estimated total cost - \$9,299,190 (\$3,722,360 PL-566 and \$5,576,830 Other). Principal problems - flooding, impaired drainage, stream pollution, lack of recreational facilities, swamping of agricultural land, and need for future municipal and industrial water supply. Landownership and use - 79 percent owner-operated; 84,128 acres cropland, 19,334 acres grassland, and 9,415 acres woodland.

Progress in Land Treatment. Approximately 31 percent of the planned land treatment measures have been applied. Of the 840 farmers in the watershed, 488 are cooperators with the Henry and Rush County soil and water conservation districts. The total land acreage under co-operator agreement is 59,760 of which 18,000 acres have had complete conservation treatment applied to the land. There have been 429 conservation plans prepared within the watershed. The U.S. Forest Service has marked 600 acres of woodland for harvest, and tree planting has taken place on 240 acres within the project area. The soil survey work is 100 percent complete and the estimated cost of land treatment is \$3,528,590.

Progress in Structural Measures. Five floodwater retarding structures have been completed at a PL-566 cost of \$838,800. One multi-purpose recreation, flood control, and water supply structure has been completed at a PL-566 cost of \$208,015. One public recreation facility has been completed at a PL-566 cost of \$98,895; 7.5 miles of stream channel improvement have been completed at a PL-566 cost of \$69,700; 2.5 miles of stream channel work have been completed by the Conservancy District without PL-566 funds. An A&E contract for the design of basic recreation facilities has been completed at a PL-566 cost of \$7,000. An A&E contract for the topographic mapping of one multi-purpose recreation, flood control, and water supply structure and two multi-purpose low flow augmentation flood control structures has been completed at a PL-566 cost of \$16,000. An A&E contract for the design of a multi-purpose recreation, flood control, and water supply structure is presently under contract at an estimated PL-566 cost of \$154,000. An A&E contract for the design of two multi-purpose low flow augmentation and flood control structures is presently under contract at a PL-566 cost of \$117,000. Fencing of a multi-purpose structure has been completed at a PL-566 cost of \$7,950.

UPPER BIG BLUE RIVER PROJECT

Progress in Obtaining Easements and Rights-of-Way. The Conservancy District has expended approximately \$372,000 for the land rights for five floodwater retarding structures and the stream channel work that has been completed. Purchase of approximately 550 acres for a multi-purpose recreation, flood control, and water supply structure has been completed at a total cost of \$210,200. The PL-566 cost-share was \$62,400. Purchase of approximately 2,600 acres for a multi-purpose recreation, flood control and water supply structure has been completed or is being processed at a total cost of approximately \$1,514,550. The PL-566 cost-share is \$497,000. To date, \$27,550 has been paid in relocation costs. The PL-566 cost share is \$11,023.

Effectiveness of Project Proved. Five floodwater retarding structures are complete and functioning as intended. Observation of peak flows downstream of the structures indicates that the planned level of protection is being attained. The stream channel work completed shows significant benefits in drainage of land adjacent to the channels, reduction in the frequency of flooding, and improvement of the fishery habitat as evidenced by an increase in the number of species identified after project installation. The general public is making high use of the basic recreation facilities.

WEST BOGGS CREEK PROJECT
DAVIESS & MARTIN COUNTIES
FY 1976

The Project in Brief. Authorized - October 18, 1966. Estimated completion in the fiscal year 1977. Area - 14,121 acres (100 percent privately-owned with the exception of 1,215 acres owned by the joint park board). Sponsors - Daviess and Martin Park and Recreation Board, and the West Boggs Creek Ditch Repair and Maintenance District. Estimated cost - \$1,780,214 (\$629,193 PL-566 and \$1,151,021 Other). Principal problems - floodwater and sediment damage to agricultural crops and land, and need for a recreational development. Landownership and use - approximately 180 farms in watershed, 65 percent of farmers have off-farm income; 7,200 acres of cropland, 2,540 acres of grassland, 3,390 acres of woodland, and 990 acres of miscellaneous and idle land.

Progress in Land Treatment. Of the 140 potential cooperators in the watershed, 116 are cooperators and 81 have conservation plans developed. Estimated land treatment costs are \$629,193, of which \$40,493 is for technical assistance. Additional REAP funds were allocated to assist with practice application acceleration. Practices which are being stressed by resource conservation planning are parallel tile outlet terraces, diversions, grassed waterways, tree planting, minimum tillage, wildlife habitat management, and pasture management.

Progress in Structural Measures. Construction is complete on the one multi-purpose structure for the 622-acre lake. Channel work is being reconsidered to determine need and feasibility. The county roads have been raised in five locations where the road elevations were below the level of the lake. The recreational facilities in the 250-acre park are a joint venture of the Indiana Department of Natural Resources, Bureau of Outdoor Recreation and the Daviess and Martin County Park and Recreation Board. Construction is complete for phase "A" of the park. Construction is underway on phases "B" and "C" of the campgrounds, additional picnic areas, outdoor laboratories, outdoor sports areas and shelterhouses. An erosion problem adjacent to the emergency spillway was solved by constructing erosion control structures, a diversion and installing tile. This work was completed in the fall of 1974.

Effectiveness of Project Proved. In July 1973, a 7-inch rain during a 48-hour period created severe flooding in areas adjoining the watershed which were not protected by flood control measures. Little or no flooding occurred below the multi-purpose structure. Many farmers said they would have lost their entire crop on the bottomland if this structure had not been constructed. The 250-acre park and recreation area has been used extensively. In fact, income from facilities paid first-year operating expenses. The lake has been stocked with bass, redear, channel catfish and bluegill; fishing is excellent.

WEST BOGGS CREEK PROJECT

During fall migration, the lake was open for duck hunting. This has brought increased income to the community. Several new businesses have been started such as restaurants, hotels, a grocery store, roadside market, bait and boat shops, service stations, etc. Several of the older establishments and businesses have been remodeled and expanded to accommodate growing demand. Three subdivisions have been developed along with a mobile home park and private camping facilities. Local community leaders are very pleased with the success of the project to date.

EAST FORK OF WHITEWATER RIVER PROJECT
WAYNE, UNION, FAYETTE, RANDOLPH & FRANKLIN COUNTIES, INDIANA
AND
DARKE & PREBLE COUNTIES, OHIO

The Project in Brief. Authorized - October 1974. Estimated completion - in the fiscal year 1983. Area - 246,900 acres. Sponsors - Indiana - soil and water conservation districts of Wayne, Union, Randolph, Fayette, and Franklin Counties, and the Whitewater Valley Conservancy District; Ohio - soil and water conservation districts of Darke and Preble Counties, and the Jefferson Township Park Board. Estimated total cost - \$10,493,987 (\$3,211,428 PL-566 and \$7,282,559 Other). Principal problems - lack of recreational opportunities in the area; need for additional municipal and industrial water supply; floodwater damage to crops, pasture, agricultural properties, roads, and bridges; erosion and/or sediment damage to flood plains, channels, roads, bridges, and existing reservoirs; floodwater and impaired drainage conditions on about 600 acres in upstream channel areas; and deterioration of the quality of the environment.

Progress in Land Treatment. There are about 1,216 farms in the watershed. In Indiana, approximately 54 percent of these farms are under cooperative agreement with the local soil and water conservation districts. Of these, 29 percent have basic plans and 50 percent of the land is adequately treated. Soil survey mapping has been done on about 6,000 acres in the Indiana portion of the watershed this year. Construction plans for two special land treatment sites have been prepared. In the Ohio portion, of 224 farms about 50 percent of the farms are under cooperative agreement. Approximately 37 percent of the farms have conservation plans.

Progress in Structural Measures. The planned structural measures include: 1 floodwater retarding structure; 3 multiple-purpose floodwater retarding-recreation structures with public recreation facilities; 2 multiple-purpose floodwater retarding-water supply structures; 1 channel recreation development; and 19.6 miles of multiple-purpose flood prevention and drainage channel work. In Indiana, the field surveys on 1 floodwater structure are complete. On August 30, 1975, the Wayne County Circuit Court disapproved the Indiana portion of the work plan. A hearing by the Natural Resources Commission was held on June 21, 1976, in Richmond on a petition to dissolve the Conservancy District. The State Commission is to report their findings to the Wayne County Circuit Court on October 26, 1976. The Conservancy District has been studying several alternatives to the planned work in Indiana. In Ohio, bids are planned to be let on 4.4 miles of channel improvement on the New Madison branch of Upper East Fork. No construction contracts have been awarded.

EAST FORK OF WHITEWATER RIVER PROJECT

Progress in Obtaining Easements and Rights-of-Way. In Indiana, the Conservancy District has prepared a land rights agreement for use in obtaining land rights on the special land treatment measures. No funds have been spent on land rights acquisition. The Conservancy District has about \$185,000 available for acquisition and construction.

RIVER BASIN STUDIES

River basin studies by the United States Department of Agriculture (USDA) are carried out under the authority of Section 6 of the Watershed Protection and Flood Prevention Act (PL-566, 83rd Congress, as amended). Currently, in Indiana, framework studies on the Ohio River Basin, Upper Mississippi River Basin, and the Great Lakes Basin have been completed. The Type II Comprehensive Study is completed for the Wabash River Basin. A cooperative survey has been completed on the Elkhart and the Kankakee river basins. A Level B Comprehensive Study is underway on the Maumee River Basin and the Ohio Main Stem.

The principal participants for the USDA in these studies are the Soil Conservation Service (SCS), U.S. Forest Service (FS), and the Economic Research Service (ERS). Further information regarding the various river basin studies in Indiana can be obtained from Mr. Cletus J. Gillman, State Conservationist, Soil Conservation Service, 5610 Crawfordsville Road, Suite 2200, Indianapolis, Indiana 46224.

Kankakee River Basin

The Kankakee River Basin is a part of the eastern portion of the Upper Mississippi River Basin and is a tributary of the Illinois River.

The Kankakee River Basin is located in northwestern Indiana and northeastern Illinois and has a total drainage area of 5,280 square miles. Of this, 2,155 square miles are in Illinois and 3,125 square miles are in Indiana. The Indiana portion is comprised of 2,190 square miles which drain directly into the Kankakee River and 935 square miles which are part of the Iroquois River drainage system. The Iroquois River lies to the south of the Kankakee River and joins the Kankakee about 5 miles upstream from Kankakee, Illinois. The other major tributary is the Yellow River which comprises 427 square miles entirely in Indiana.

The Department of Natural Resources, State of Indiana (IDNR), requested the USDA to make a cooperative River Basin Investigation and Survey of the Kankakee River Basin, Indiana. The study is needed to determine the water and related land resource problems and needs, to propose solutions to problems associated with watershed protection, flood prevention, channel drainage, municipal and industrial water supply, fish and wildlife, recreation, water quality and other related purposes, and to determine the extent to which action will be needed beyond the scope of available going programs.

On July 23, 1970, the state conservationist for Indiana was advised that the study would be funded in fiscal year 1971. The study was completed in October 1976.

The SCS, FS and the ERS, with the assistance of IDNR, are co-operating with representatives of other federal, state and local agencies in the preparation of a comprehensive program for the conservation and development of water and related land resources to meet foreseeable short- and long-term needs. Projects and programs that should be initiated within the next 10 to 15 years will be identified. The USDA provided assistance in identifying problems and needs and recommended solutions for recognized problems. Assistance from agencies outside of USDA, including contribution of information and review of study findings, was utilized.

Several types of studies have been made, but all have been for or by special interests. The Corps of Engineers has studied channel work and levee construction for flood control along the main channel. The SCS was reimbursed by the Corps to make a tributary drainage study to help them determine the benefits which will accrue to agriculture by works of improvement on the mainstem. Wildlife interests have attempted to cause reversion of large areas back to wildlife preserves. Many farmers and land-owners want drainage and flood prevention. No comprehensive study or plan with the goal of an overall plan which would be agreeable to all major interests with alternative courses of action has ever been attempted in this basin. Such a plan is vitally needed to allow progressive long-range resource management and development of the basin.

This basin is part of the Upper Mississippi River Basin on which a framework plan was completed in 1972.

The purpose of the study is to present the best combination of alternatives for solution that can be achieved in cooperation with local interests. This was done by combining all facts from previous studies, making surveys to fill in any remaining information gaps, and working with concerned local, state and federal agencies.

Elkhart River Basin

The Elkhart River Basin is a tributary of the St. Joseph River and part of the Great Lakes Basin. The Elkhart River Basin is located in northcentral Indiana and has a total drainage area of 710 square miles. The Elkhart River originates in the northeastern part of DeKalb County, flows westward across Noble County into Elkhart County, then northeasterly to the city of Elkhart where it enters the St. Joseph River. The Elkhart

River Basin includes parts of five Indiana counties - DeKalb, Noble, LaGrange, Kosciusko and Elkhart.

The IDNR requested USDA to participate in a cooperative river basin survey of the Elkhart River Basin. The study is needed to determine the water and related land resource problems and needs and to propose solutions to problems associated with watershed protection, flood prevention, drainage, municipal and industrial water supply, fish and wildlife, recreation, water quality and other related purposes such as lake level control, and to determine the extent to which action will be needed beyond the scope of available going programs.

On July 23, 1970, the state conservationist for Indiana was advised that the study would be funded in fiscal year 1971. The study was completed in July 1976.

The SCS, FS, and ERS, with the assistance of IDNR, are co-operating with representatives of other federal, state and local agencies in the preparation of a comprehensive program for the conservation and development of water and related land resources to meet foreseeable short- and long-term needs. Projects and programs that should be initiated within the next 10 to 15 years were identified.

The USDA provided assistance in identifying problems and needs and recommended solutions for recognized problems. Assistance from agencies outside of USDA, including contribution of information and review of study findings, was utilized.

This basin is part of the Great Lakes Basin on which a framework plan was completed in 1974, and part of the St. Joseph River on which limited studies have been made.

The purpose of the study is to present the best combination of alternatives for solution that can be achieved in cooperation with local interests. This was done by combining all facts from previous studies, making surveys to fill in any remaining information gaps, and working with concerned local, state and federal agencies.

Wabash River Basin Comprehensive Study

The Wabash River Basin is located between Lake Michigan and the Ohio River in the northwestern portion of the Ohio River Basin. The basin includes a total of 33,100 square miles or about 21 million acres in the three states of Illinois, Indiana and Ohio. About 8,563 square miles are in Illinois, 24,218 in Indiana and 319 in Ohio.

The Congress of the United States directed a comprehensive study of the region by responsible federal agencies in cooperation with state and local governments. The study was begun in 1962, with USDA participation beginning in 1963. The state conservationist of Indiana was designated USDA representative on the Wabash study coordinating committee. The plan, completed in 1971, provides for the conservation, development and utilization of water and related land resources to meet immediate needs and projected requirements for the next 50 years.

The USDA responsibilities included the determination of future agricultural land and water needs, and an appraisal of the floodwater problems and needed upstream developments. In the course of the study, over 540 hydrologic units (small watershed areas) were examined with 180 selected for further detailed study and analysis. Over 1,300 dam sites were reviewed and this information is included in the final report. There are 287 structures planned as part of the "early action" projects.

It was determined that 85 potential projects in the upstream watersheds needed to be developed in the next 10 to 15 years. This determination was based on the urgency of local needs, problems, and interest. A watershed investigation report was prepared for 62 of these projects. These reports include sufficient information to inform local organizations of the project possibilities and also to serve as a guide for detailed studies in watershed planning.

The final USDA report on the Wabash River Basin describes the present and future agricultural needs for land, land treatment and management. Special emphasis is placed on their relation to water resources, and the present and future needs for project-type developments. It includes discussions of the present and projected agricultural economy of the basin, the needs and potential for water and related land resource development, opportunities for development in the near and projected future, and the impact of USDA programs.

The Ohio River Basin Commission has integrated the study into their Comprehensive Coordinated Joint Plan (CCJP) baseline and priorities report.

Ohio River Basin - Framework Study

The Ohio River Basin study area is bounded on the north by the Great Lakes drainage area, on the east by the divide of the Appalachian Mountains, on the south by the Tennessee River Basin, and on the west by the Mississippi River drainage area. It includes all or part of the states of Illinois, Indiana, Ohio, Kentucky, West Virginia, Pennsylvania, New York, Maryland, Virginia, North Carolina and Tennessee. The basin area under study includes 163,000 square miles, omitting only the Tennessee River Subbasin area.

Congress authorized the framework study of the Ohio River Basin in 1962 and USDA activities began in 1964. The state conservationist for Indiana was designated by the Secretary of Agriculture as the Department's representative on the coordinating committee. The agricultural report was completed and printed in 1966.

The objective of this survey was to provide a broad guide for the best uses of water and related land resources. The USDA had primary responsibility to determine land and water needs for agriculture and the water problems in upstream areas. This also included the appraisal of potential project development in these upstream regions.

For Indiana, this involved the summarization of Wabash River Basin data and the analysis of water problems and needs in the Whitewater River area. The Ohio River drainage was also considered, including Pigeon Creek, Anderson River, Indian Creek and Silver Creek. Similar studies were carried out in the 11 states within, or partly within the Ohio Basin.

The report includes some highly important information about agriculture and potential developments over the next 50 years. In upstream areas, agriculture damage is approximately \$30 million and urban damage approximately \$15 million. This damage occurs on three million acres of floodplain land in these areas. Over one-third of this damage affects Indiana.

The study also shows about 600 potential upstream watershed projects within the basin with approximately 25 percent of these in Indiana. Nearly 11 million acres of cropland are in need of protection from erosion. Sixteen million acres of pastureland need improve and 22 million acres of forest land need improvement in the timber stands, or further stand establishment.

The Ohio River Basin Survey is complete.

Upper Mississippi River Basin - Framework Study

The Upper Mississippi River Basin study area is located in the northcentral United States. It is bound on the north by the Hudson Bay drainage area; on the northeast by Great Lakes Basin drainage; on the southeast by the Ohio River Basin; on the south by the Arkansas, White and Red rivers; and on the west by the Missouri River drainage. It includes 189,037 square miles in the states of Illinois, Indiana, Wisconsin, Michigan, Minnesota, South Dakota, Iowa and Missouri.

The survey that is being carried on in the Upper Mississippi River Basin is similar to that described for the Ohio River Basin.

The state conservationist of Iowa was designated as the USDA representative on the coordinating committee.

Indiana is involved in this survey since a large part of the Kankakee River drainage area is in the northwestern part of the state. The Indiana portion of this basin study was completed in calendar year 1967. The Kankakee River Basin Type IV Study, previously described, includes all of the Upper Mississippi River Basin which lies in Indiana.

From the projections made in these various river basin studies, it is evident that the need for "project type" approaches to water and related land resource problems is very great in Indiana. This condition is reflected in our rapidly expanding watershed protection program. We must be prepared to accept this responsibility for the people of the Hoosier State.

The Upper Mississippi River Basin Survey and Report was completed in 1972. The Upper Mississippi River Basin Commission was established in 1972 to coordinate and develop plans for water and related land resource development within the basin.

Great Lakes Basin - Framework Study

The Great Lakes Basin Study includes all of the area in the United States that drains into the Great Lakes and those streams entering the St. Lawrence River within the United States. It includes about 129,000 square miles of which about 68,000 are land area and about 61,000 are water area. The land areas of the basin are in the states of Minnesota, Wisconsin, Illinois, Michigan, Indiana, Ohio, Pennsylvania and New York.

In 1966, the President of the United States established the Great Lakes Basin Commission upon request of the majority of the states involved. The Commission includes representatives of the eight states and the federal departments having major responsibilities in the development of land and water resources in the basin. The state conservationist of Michigan was designated as the USDA representative on the Commission.

The Great Lakes Basin Commission initiated a framework survey of the basin in fiscal year 1968. This survey was similar in purpose and scope to that described for the Ohio River Basin. The study was coordinated by the commission and the report was completed in 1974.

The study involves Indiana since a large part of the Maumee River Basin is in northeastern Indiana, the St. Joseph River is in northern Indiana, and the Calumet River is in northwestern Indiana. Agricultural data have been evaluated and tabulated

by counties and published by Conservation Needs Inventory. The latest publication for Indiana is dated 1968. These data are the basis for analysis of problems and needs and for recommended solutions.

Maumee River Basin

The Maumee River Basin is located in northeastern Indiana, northwestern Ohio and southeastern Michigan, with the major cities of Fort Wayne, Indiana, and Toledo, Ohio. This basin is part of the Great Lakes Basin Framework Study.

The Maumee study is the first Level B study in the nation authorized under Section 209 of Public Law 92-500. The study was begun in 1973 and is scheduled for completion in 1976. The state conservationist of Ohio has been assigned responsibility for the USDA technical participation in the study.

The USDA primary responsibilities include an appraisal of flooding, erosion and sedimentation, the agricultural reference, and land use and management with some input into other references.

Ohio Main Stem River Basin

The Level B Ohio Main Stem River Basin is located on both sides of the Ohio River and covers 45,000 square miles in Indiana, Illinois, Kentucky, Ohio, West Virginia and Pennsylvania. The study is divided into three subareas for ease in data collection as follows: Subregion 503, Upper Ohio - 16,000 square miles in Ohio, Pennsylvania and West Virginia; Subregion 509, Middle Ohio - 11,000 square miles in Indiana, Kentucky, Ohio and West Virginia; and Subregion 514, Lower Ohio - 18,000 square miles in Illinois, Indiana and Kentucky. This basin is part of the Ohio River Basin Framework Study.

The study was begun in 1976 and is scheduled for completion in 1978. The state conservationist of Indiana has been assigned responsibility for the USDA technical participation in the study.

WATERSHED CONSTRUCTION

Units of Contract Work to be Awarded During the Period
October 1, 1976 to September 30, 1977

<u>Congressional District</u>	<u>Watershed and (County) Location</u>	<u>Measure</u>	<u>Contract Dollars (PL-566)</u>
5th	Rock Creek-Cass (Cass and Carroll)	Channel Work	\$ 749,420
7th	Bachelor Run (Carroll and Howard)	Unit 4	\$ 129,004
	Fall Creek (Warren)	Channel Work	\$ 9,000
	Little Raccoon Creek (Parke, Montgomery & Putnam)	Channel Work	\$ 65,125
	Lye Creek Drain (Montgomery)	Reach B & Durham Ditch	\$ 237,092
	Prairie Creek-Vigo (Vigo)	Channel Work	\$ 314,472
		Subtotal	\$ 754,693
9th	Delaney Creek (Washington)	Structure 5 Rec. Facilities	\$ 250,000
	Twin-Rush Creek (Washington)	Structure 1	\$ 342,570
	Stucker Fork (Scott, Jefferson & Washington)	Structure 16A	\$ 150,000
		Subtotal	\$ 742,570
10th	Upper Big Blue River (Henry & Rush)	Structure 20	\$ 1,422,900
	PL-566 Construction Cost	TOTAL	\$ 3,669,583

WATERSHED CONSTRUCTION

PL-566 Installation Services
for Land Treatment and Structural
Measures (Est. for FY-1977) \$ 1,300,000

CURRENT AND PROJECTED STATUS OF WATERSHED OPERATIONS

7th Congressional District

Lye Creek Drain - Channel Work - Construction expected to start February 1977.

Little Raccoon Creek - Channel Work - Construction expected to start October 1976.

Little Walnut Creek - Structure 4 Fence - Construction expected to start October 1976.

Fall Creek - Channel Work - Construction expected to start October 1976.

Bachelor Run - Channel Work - Construction expected to start July 1977.

Prairie Creek-Vigo - Channel Work - Construction expected to start November 1976.

8th Congressional District

Middle Fork of Anderson River - Kraus Creek Channel Repair - Construction expected to start September 1976.

9th Congressional District

Stucker Fork - Structure 16A - Construction expected to start September 1976.

INDIANA CONSERVANCY DISTRICTS
FOR
SMALL WATERSHED PROJECTS
(ACTIVE PROJECTS)

ANDERSON RIVER CONSERVANCY
DISTRICT

Joe Jasper, Chairman
c/o St. Meinard Abbey
St. Meinard, IN 47577

BACHELOR RUN CONSERVANCY
DISTRICT

Milton Bowman, Chairman
P.O. Box 85
Flora, IN 46929

BAILEY-COX-NEWTON CONSERVANCY
DISTRICT

Frank Pulver, Chairman
Route 4
Knox, IN 46534

BIG RACCOON CONSERVANCY
DISTRICT

Chester Dickerson, Chairman
Masonic Building
Ladoga, IN 47954

BUSSERON CONSERVANCY
DISTRICT

Harold Dodd, Chairman
Court House
Sullivan, IN 47882

CROYS CREEK CONSERVANCY
DISTRICT

Ray Stevenson, Chairman
R. R. #3
Brazil, IN 47834

DELANEY CREEK CONSERVANCY
DISTRICT

Ralph Dickmeyer, Chairman
202 N. Mill Street
Salem, IN 47167

HALL-FLAT CREEK CONSERVANCY
DISTRICT

Raymond Schnaus, Chairman
R. R. #1
St. Anthony, IN 47575

JORDAN CREEK CONSERVANCY
DISTRICT

Jack Cole, Chairman
Williamsport, IN 47993

LITTLE RACCOON CONSERVANCY
DISTRICT

John Stryker, Chairman
Court House
Rockville, IN 47872

LITTLE WALNUT CREEK CONSERVANCY
DISTRICT

Tilghman Ruark, Chairman
Moore Building
Greencastle, IN 46135

LOST RIVER-SPRINGS VALLEY CONSERVANCY
DISTRICT

Bill Taggart, Chairman
Roosevelt Street
Orleans, IN 47452

MIDDLE FORK WATERSHED CONSERVANCY
DISTRICT

Karl Gayer, Chairman
P.O. Box 248
Cannelton, IN 47520

MILL CREEK-FULTON CONSERVANCY
DISTRICT

Loren Cunningham, Chairman
513 N. Main Street
Rochester, IN 46975

MUDDY FORK WATERSHED CONSERVANCY
DISTRICT

John E. Dreyer, Chairman
c/o Borden Museum
Borden, IN 47106

PRAIRIE CREEK-VIGO CONSERVANCY
DISTRICT

Lloyd Deutsch, Chairman
Southland Box 2038
Terre Haute, IN 47802

PRIDES CREEK CONSERVANCY
DISTRICT

Gardner Willis, Chairman
R. R. #2
Petersburg, IN 47567

ROCK CREEK CASS-CARROLL CONSERVANCY
DISTRICT

Carl B. Jones, Chairman
Market & Monroe Streets
Delphi, IN 46923

ROCK CREEK-WELLS CONSERVANCY
DISTRICT

Herman Osborn, Chairman
122 LaMar Street
Bluffton, IN 46714

STUCKER FORK CONSERVANCY
DISTRICT

Robert Cathcart, Chairman
440 S. Gardner, Box 135
Scottsburg, IN 47170

TWIN-RUSH CREEK CONSERVANCY
DISTRICT

Dale Martin, Chairman
202 N. Mill Street
Salem, IN 47167

BIG BLUE RIVER CONSERVANCY
DISTRICT

George Denton, Chairman
1224! Broad Street
New Castle, IN 47362

WHITEWATER VALLEY CONSERVANCY
DISTRICT

Douglas C. Dickey, Chairman
303 South A Street
Richmond, IN

OTHER SPONSORING LOCAL ORGANIZATIONS

WILLIAMSPORT BOARD OF PARKS AND
RECREATION

(Fall Creek Watershed)
Austin Thomas, President
25 Fall Street
Williamsport, IN 47993

WEST BOGGS CREEK DITCH REPAIR AND
MAINTENANCE DISTRICT

(West Boggs Creek Watershed)
Wayne Walton, Chairman
R. R. #3
Loogootee, IN 47553

MONTGOMERY COUNTY DRAINAGE
BOARD

(Lye Creek Drain Watershed)
Samuel R. Boots, Chairman
Court House
Crawfordsville, IN 47993

